Website:http://biz.LGservice.com
E-mail:http://www.LGEservice.com/techsup.html

COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. :

MODEL: FLATRON W2234S
(W2234S-SNI/W2234S-BNI.Axx*QP)
xx * means sales region and module type
(AxxIQP: INL 5ms, AxxVQP: AUO 5ms)

CAUTION
BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

*To apply the **MSTAR Chip**.

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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: TFT Color LCD Module
Active Display Area	: 22 inch
Pixel Pitch	: 0.282(H) x 0.282(V)
Color Depth	: 16.7M
Surface Treatment	: Hard-coating (3H), Haze=25% Anti-Glare treatment
Operating Mode	: Normally White
Backlight Unit	: Top/Bottom edge side 4-CCFL

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio

(a) For InnoLux MT220WW01-V0 panel
Left 85°/Right 85°; Top 80°/Bottom 80° at Min CR≥10

(b) For AUO M220EW01-V0 panel
Left 85°/Right 85°; Top 80°/Bottom 80° at Min CR≥10

2-2. Luminance

(a) For InnoLux MT220WW01-V0 panel
300cd/m^2 (Typ.) 220cd/m^2 (Min.) (6500k);170 cd/m^2 (Min.)(9300k)

(b) For AUO M220EW01-V0 panel
300cd/m^2 (Typ.) 220cd/m^2 (Min.) (6500k);170 cd/m^2 (Min.)(9300k)

2-3. Contrast Ratio

(a) For InnoLux MT220WW01-V0: 1000 :1 (Typical); 700:1 (minimum)

(b) For AUO M220EW01-V0: 1000 :1 (Typical); 800:1(minimum)

3. SIGNAL (Refer to the Timing Chart)

3-1. Sync Signal Type : Separate TTL; Composite; Sync On Green

3-2. Video Input Signal

1) Type : Analog
2) Voltage Level : 700 mV +/- 5% (P-P)
3) Input Impedance : 75 Ω

3-3. Operating Frequency: 31.5K~65.3K Hz

Horizontal :30 ~ 83 KHz
Vertical :56 ~ 75Hz

4. Max. Resolution

D-sub Analog: 1680*1050@60Hz

5. POWER SUPPLY

5-1. Power: AC 90~264V, 47.5~63Hz,

5-2. Power Consumption

Status	H-sync	V-sync	Video	Power	LED
Power On	on	on	active	≤ 45W	Blue
Power Saving	off	on	blanked	< 1W	Amber
	on	off	blanked	< 1W	Amber
	off	off	blanked	< 1W	Amber
Power Off	--	--	--	< 1W	Off
Burn in					Blue

6. ENVIRONMENT

6-1. Operating Temperature : 0°C to 40°C
6-2. Relative Humidity : 20% to 80%
6-3. MTBF : 60,000 HRS with 90% Confidence
Lamp Life : 50,000 Hours (Min)

7. DIMENSIONS (with TILT/SWIVEL)

Width: 509.3mm
Depth: 206mm (W Base), 63.5mm (W/O Base), 60.5mm (W/O STAND&BASE)
Height: 431.3mm (W Base), 419.8mm (W/O Base), 338.6mm (W/O STAND&BASE)

8. WEIGHT (with TILT/SWIVEL)

Net. Weight: 4.7+/-0.5 Kg
Gross Weight: 5.8+/-0.5 Kg

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. **These parts are marked ⚠ on the schematic diagram and the replacement parts list.** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

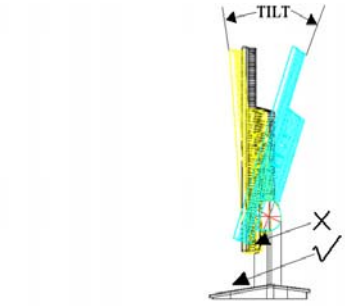
⚠ CAUTION

Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

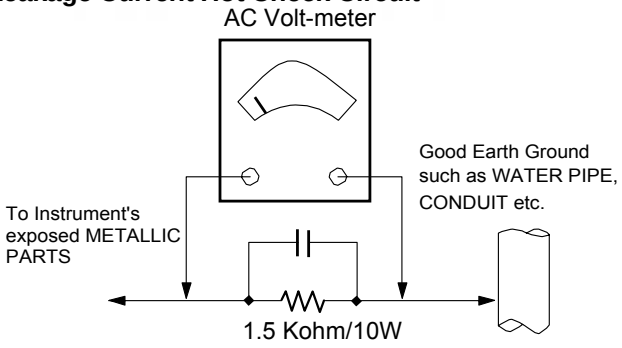
⚠ WARNING

BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.
- Be careful while tilting and rotating the monitor to avoid pinching hand(s)



Leakage Current Hot Check Circuit



SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the **SAFETY PRECAUTIONS** on page 3 of this publication.

NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
   a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
   b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
   c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
   CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
   d. Discharging the picture tube anode.
2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
   Do not test high voltage by "drawing an arc".
3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
4. Do not spray chemicals on or near this receiver or any of its assemblies.
5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
   CAUTION: This is a flammable mixture.
   Unless specified otherwise in this service manual, lubrication of contacts in not required.
6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
   Always remove the test receiver ground lead last.
9. Use with this receiver only the test fixtures specified in this service manual.
   CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid-state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range or 500F to 600F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thoroughly clean the surfaces to be soldered. Use a mall wire-bristle (0.5 inch, or 1.25cm) brush with a metal handle.
   Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
   a. Allow the soldering iron tip to reach normal temperature.
      (500F to 600F)
   b. Heat the component lead until the solder melts.
   c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
      CAUTION: Work quickly to avoid overheating the circuitboard printed foil.
6. Use the following soldering technique.
   a. Allow the soldering iron tip to reach a normal temperature (500F to 600F)
   b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.
   c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
      CAUTION: Work quickly to avoid overheating the circuit board printed foil.
   d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit board.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heat sink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heat sink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicular y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.
   CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

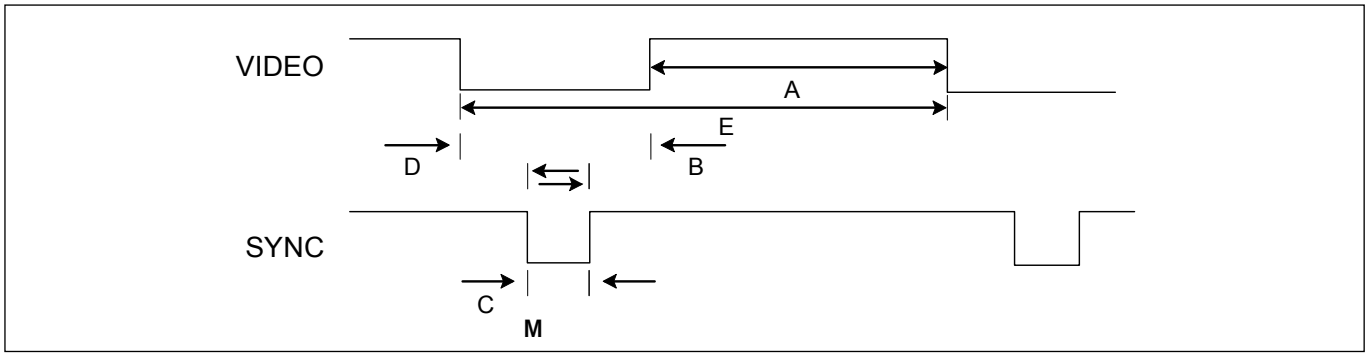
1. Remove the defective copper pattern with a sharp knife.

   Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side.

   Carefully crimp and solder the connections.

   CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

TIMING CHART



	Distingishment	Polority	DOT CLOCK [MHz]	Frequency [kHz]/ [Hz]	Total period (E)	Display (A)	Front Porch (D)	Sync. (C)	Back Porch (B)	Resolution
1	H(Pixels)	-	28.321	31.468	900	720	18	108	54	720 X 400
	V(Lines)	+		70.09	449	400	12	2	35	
2	H(Pixels)	-	25.175	31.469	800	640	16	96	48	640 x 480
	V(Lines)	-		59.94	525	480	10	2	33	
3	H(Pixels)	-	31.5	37.5	840	640	16	64	120	640 x 480
	V(Lines)	-		75	500	480	1	3	16	
4	H(Pixels)	+	40.0	37.879	1056	800	40	128	88	800 x 600
	V(Lines)	+		60.317	628	600	1	4	23	
5	H(Pixels)	+	49.5	46.875	1056	800	16	80	160	800 x 600
	V(Lines)	+		75.0	625	600	1	3	21	
6	H(Pixels)	-	65.0	48.363	1344	1024	24	136	160	1024 x 768
	V(Lines)	-		60.0	806	768	3	6	29	
7	H(Pixels)	-	78.75	60.123	1312	1024	16	96	176	1024 x 768
	V(Lines)	-		75.029	800	768	1	3	28	
8	H(Pixels)	+/-	108.0	67.5	1600	1152	64	128	256	1152 x 864
	V(Lines)	+/-		75	900	864	1	3	32	
9	H(Pixels)	+	108.0	63.981	1688	1280	48	112	248	1280 x 1024
	V(Lines)	+		60.02	1066	1024	1	3	38	
10	H(Pixels)	+	135.0	79.976	1688	1280	16	144	248	1280 x 1024
	V(Lines)	+		75.035	1066	1024	1	3	38	
11	H(Pixels)	+	119.00	64.674	1840	1680	48	32	80	1680 x 1050
	V(Lines)	-		59.883	1080	1050	3	6	21	
12	H(Pixels)	-	146.250	65.290	2240	1680	104	176	280	1680 x 1050
	V(Lines)	+		59.954	1089	1050	3	6	30	

DISASSEMBLY

#1

1. Lay the front on the side of soft cushion
2. Remove the base

#2

Unscrew the screws as showing

#3

Remove the front cover

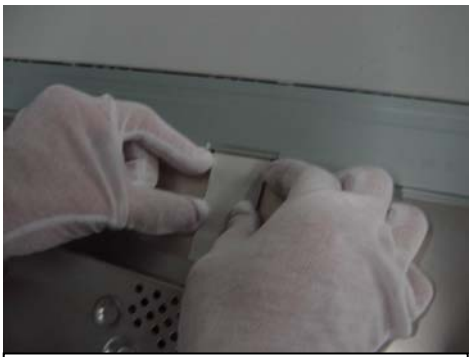
#4

Remove the back cover.

#5

Unstick the foil

#6



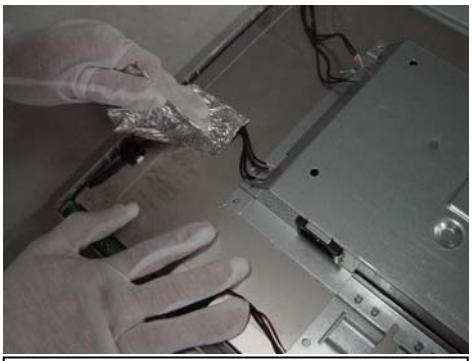
Pull out the LVDS cable

DISASSEMBLY

#7

Unstick the foil with the lamp wire (1)

#8



Unstick the foil with the lamp wire (2)

#9

Pull out the lamp wire

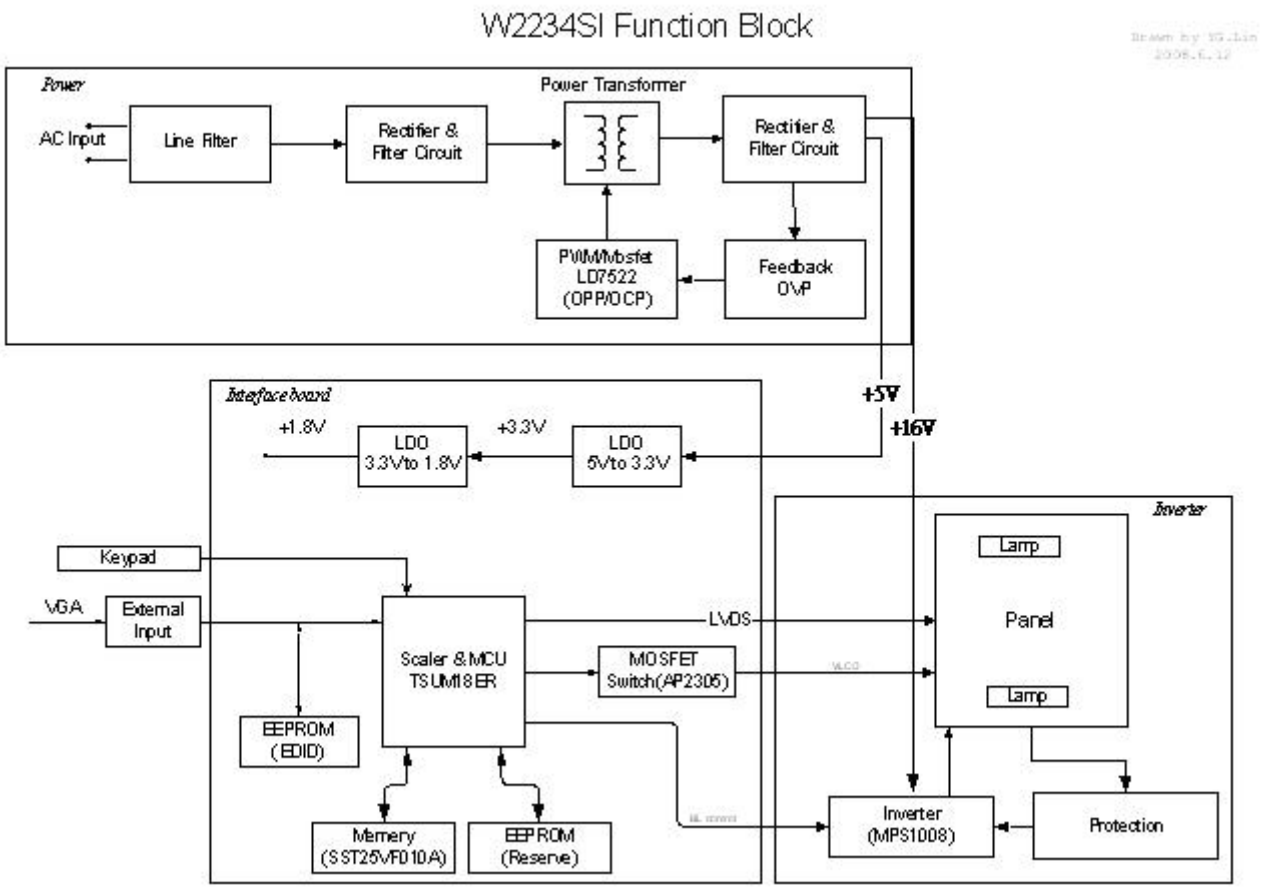
#10

Remove the keypad

#11

Remove the chassis

BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller Part.

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixel clock.

The pixel clock for each mode is generated by the PLL.

The range of the pixel clock is from 25MHz to 146MHz.

This part consists of the Scaler, ADC convertor and LVDS transmitter.

The Scaler gets the video signal converted analog to digital, interpolates input to 1680*1050resolution signal and outputs 8-bit R, G, B signal to transmitter.

2. Power Part.

This part consists of the one 3.3V, and one 1.8V regulators to convert power which is provided 5V in Power board.

16V is provided for inverter, 16V is provided for LCD panel and 5V for micom.

Also, 5V is converted 3.3V and 1.8V by regulator. Converted power is provided for IC in the main board.

The inverter converts from DC16V to AC 700Vrms and operates back-light lamps of module.

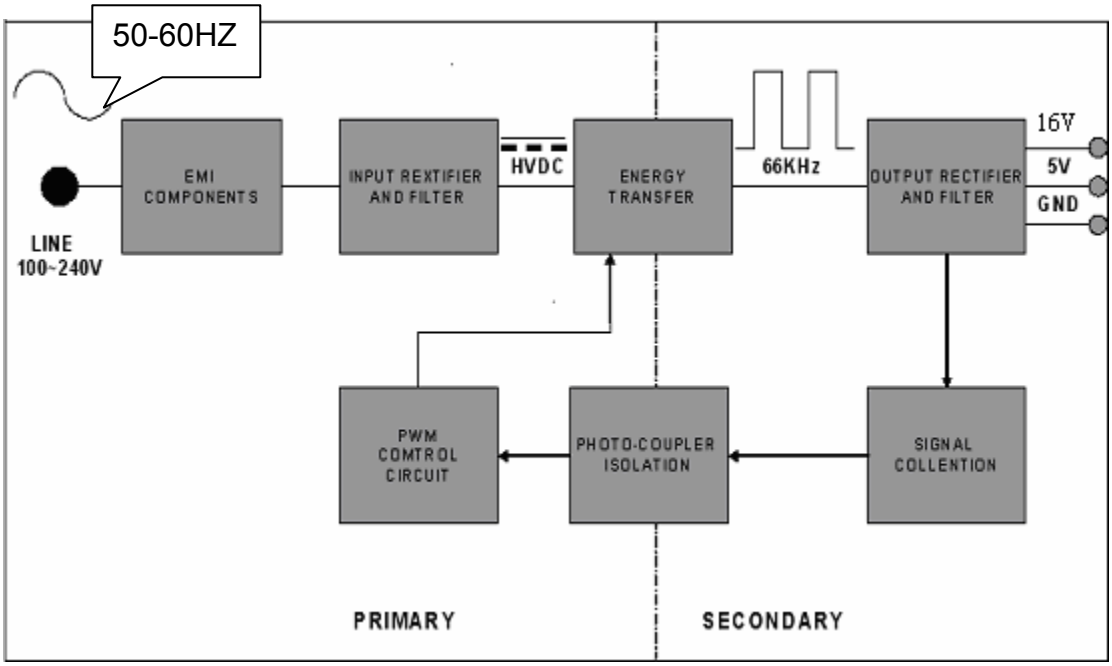
3. MICOM Part.

This part is include video controller part. And this part consists of Flash which stores control data, and the Micom which imbedded in scaler IC.

The Micom distinguishes polarity and frequency of the H/V sync are supplied from signal cable.

The controlled data of each modes is stored in Flash.

LIPS Board Block Diagram



Operation Description_ LIPS

1. EMI components.
This part contains of EMI components to comply with global marketing EMI standards like FCC, VCCI CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.
This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.
This part function is transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.
This part function is to make a pulse width modulation control and to provide the driver signal to power switch, to adjust the duty cycle during different AC input and output loading condition to achive the dc output stablize, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.
This part function is to feed back the dc output changing status through a photo transistor to primary controller to achieve the stabilized dc output voltage.

6. Signal collection.
This part function is to collect the any change from the dc output and feed back to the primary through photo transistor.

ADJUSTMENT

1. Software

a. port95nt.exe
b. Edid.exe
c. Writing data: Mars W2234

2. Hardware

a. PC（winXP, win2000 or win98）1 pc；
b. Writing tools（Including EDID writing card、connecting cable etc.）

3. EDID Writing Connection

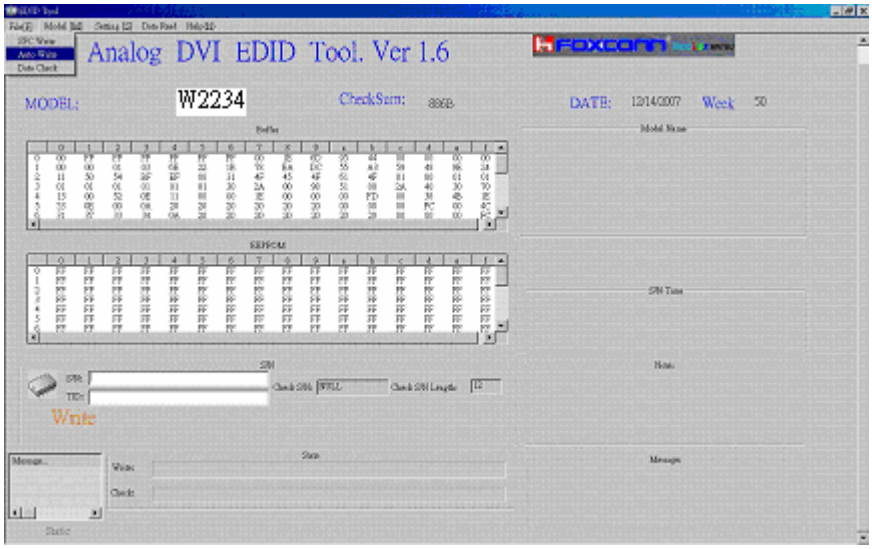
Figure 1

Figure 2

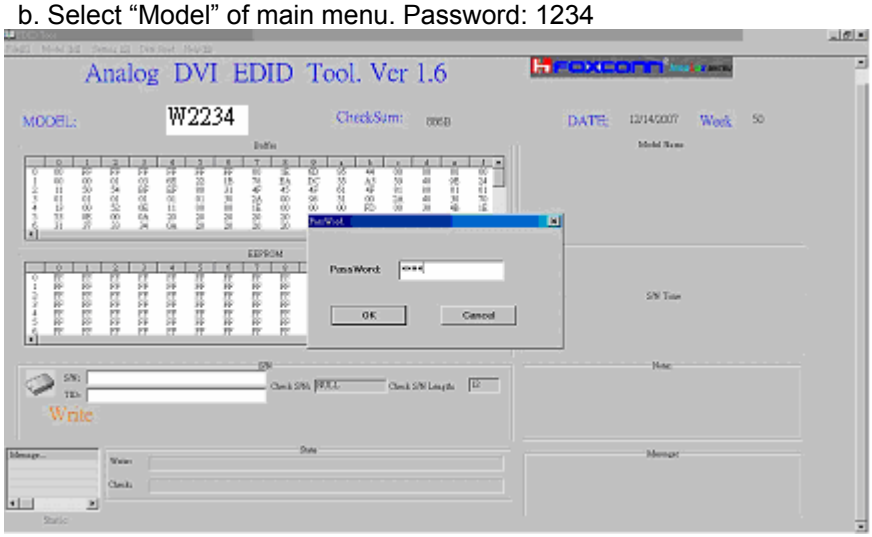
Figure 3

4. EDID Writing SOP:

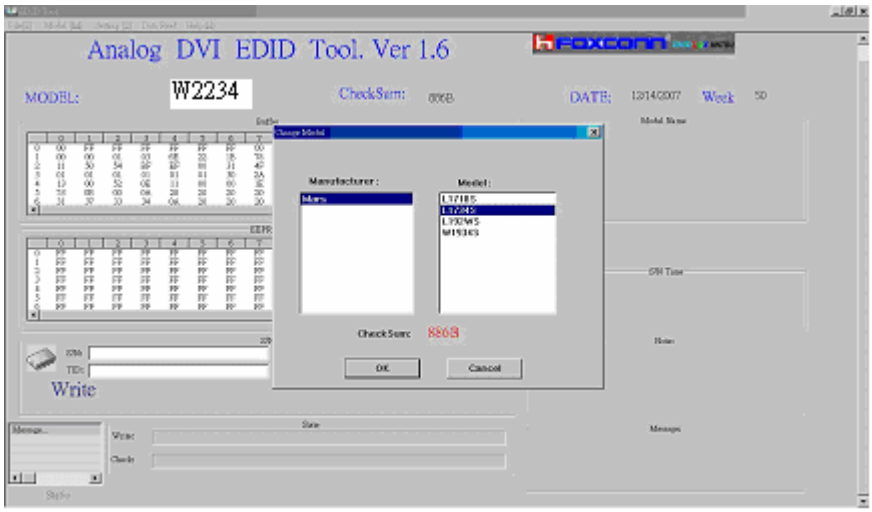
a. Select “File” submenu，select “Auto Write”.



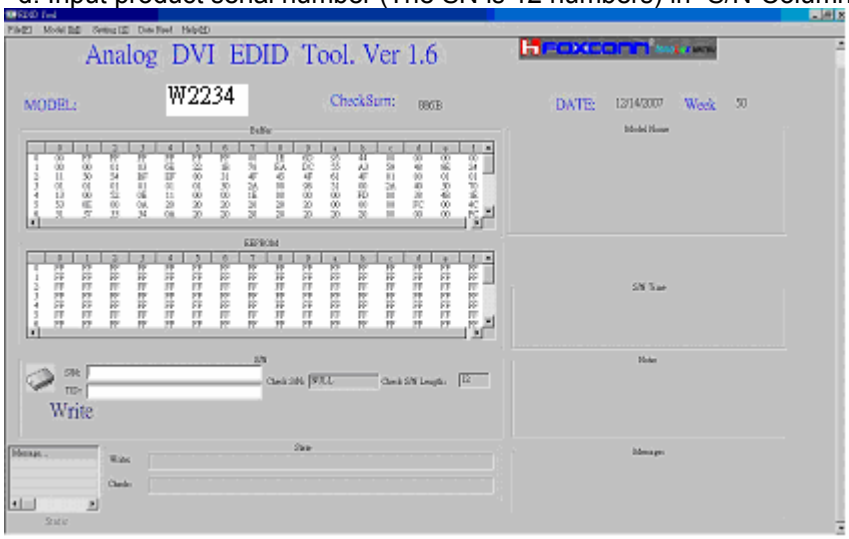
b. Select “Model” of main menu. Password: 1234



c. Select written model W2234S



d. Input product serial number (The SN is 12 numbers) in “S/N”Column, then the program auto writing start.



SERVICE OSD

1) Press MENU Key and Power Key, Monitor Will Enter Service OSD.

2) The SVC OSD menu contains additional menus that the User OSD menu as described below.
a) CLEAR ETI : To initialize using time.
b) Auto Color : W/B balance and Automatically sets the gain and offset value.
c) AGING : Select Aging mode(on/off).
d) MODULE : Show Current module Type
e) LG LOGO: ON ←→OFF. (Yes or No to display the Splash OSD in AC/DC power On time.)
f) DFC: ON ←→OFF. (Yes or No to apply the operation of DFC function.)
g) NVRAM INIT : EEPROM initialize.(24C04)
h) R/G/B-9300K : Allows you to set the R/G/B-9300K value manually.
i) R/G/B-6500K : Allows you to set the R/G/B-6500K value manually.
j) R/G/B-Offset : Allows you to set the R/G/B-Offset value manually.(Analog Only)
k) R/G/B-Gain : Allows you to set the R/G/B-Gain value manually.(Analog Only)
l) RS232: Enable/Disable Debug Mode(on/off)
m) sRGB: Allows you to set the sRGB value manually

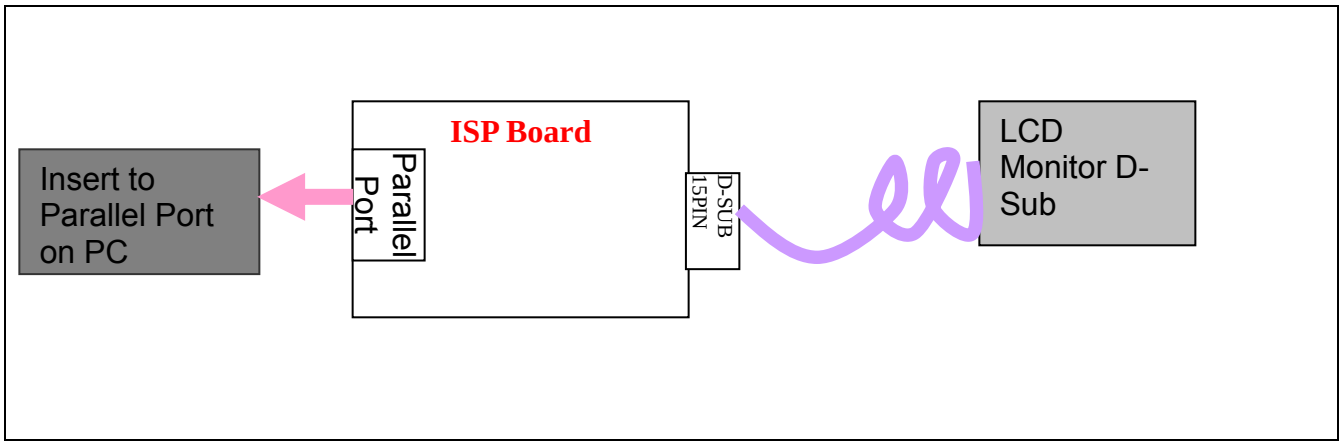
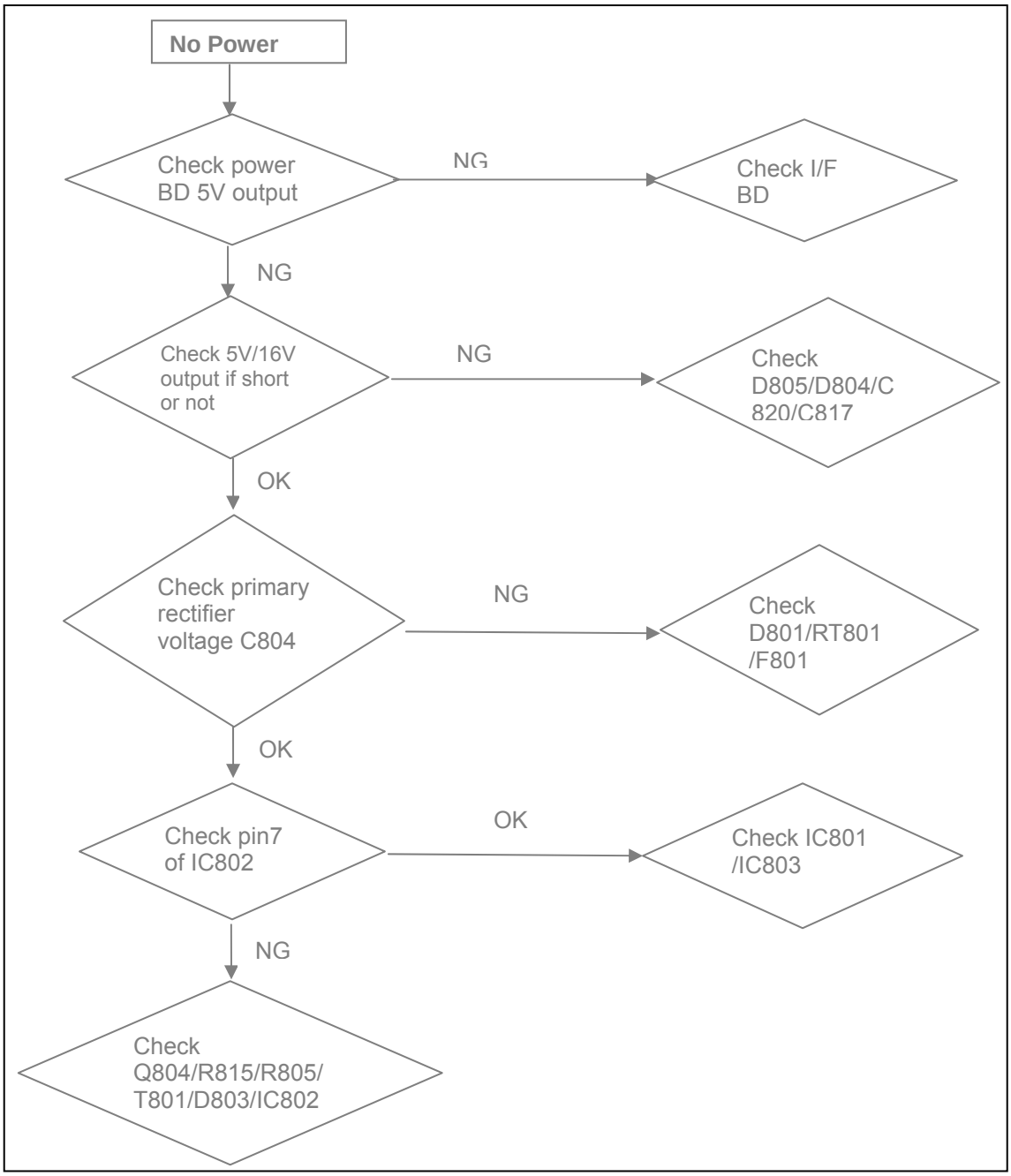


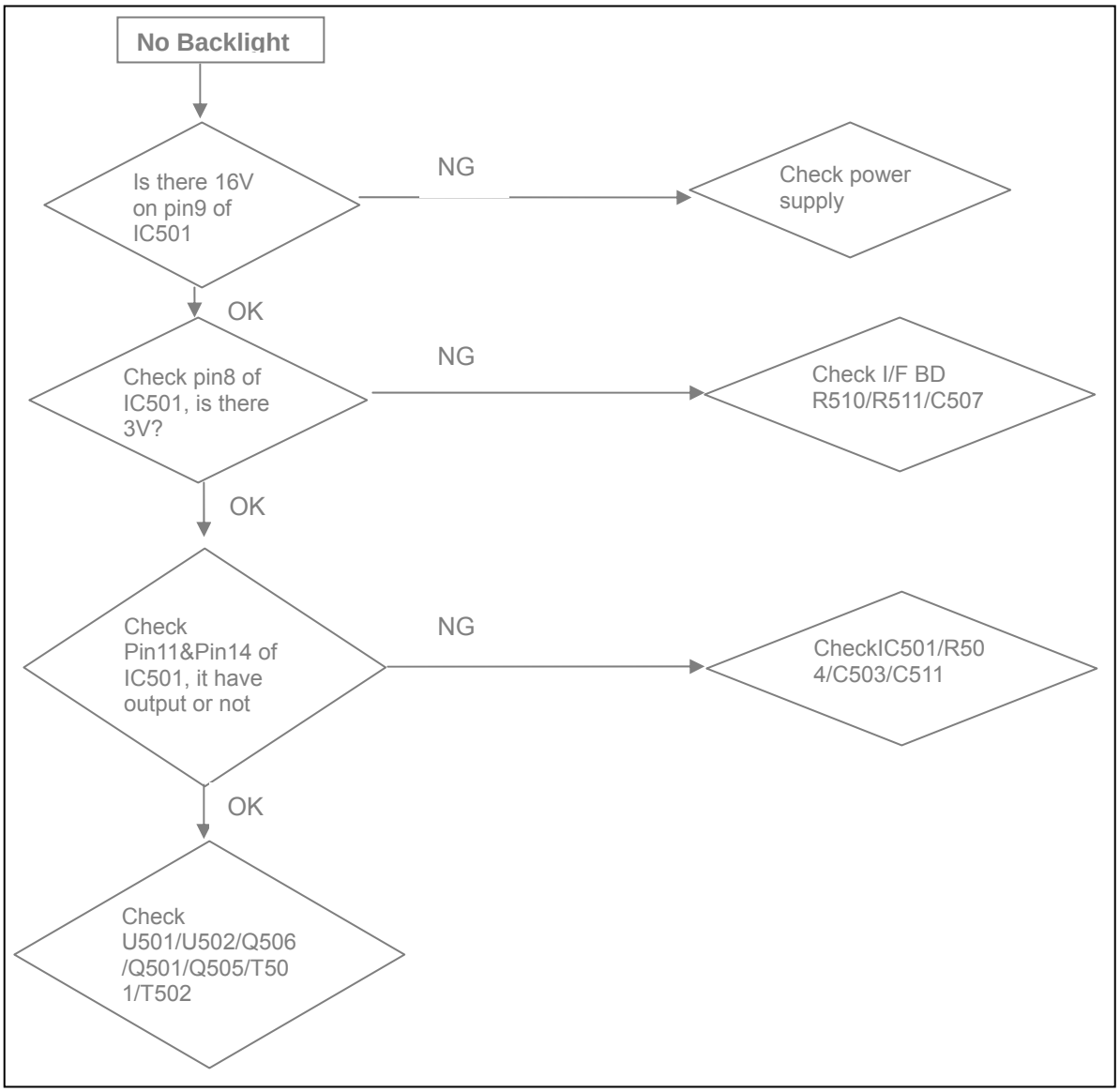
Figure 1.Cable Connection For ISP

TROUBLESHOOTING GUIDE

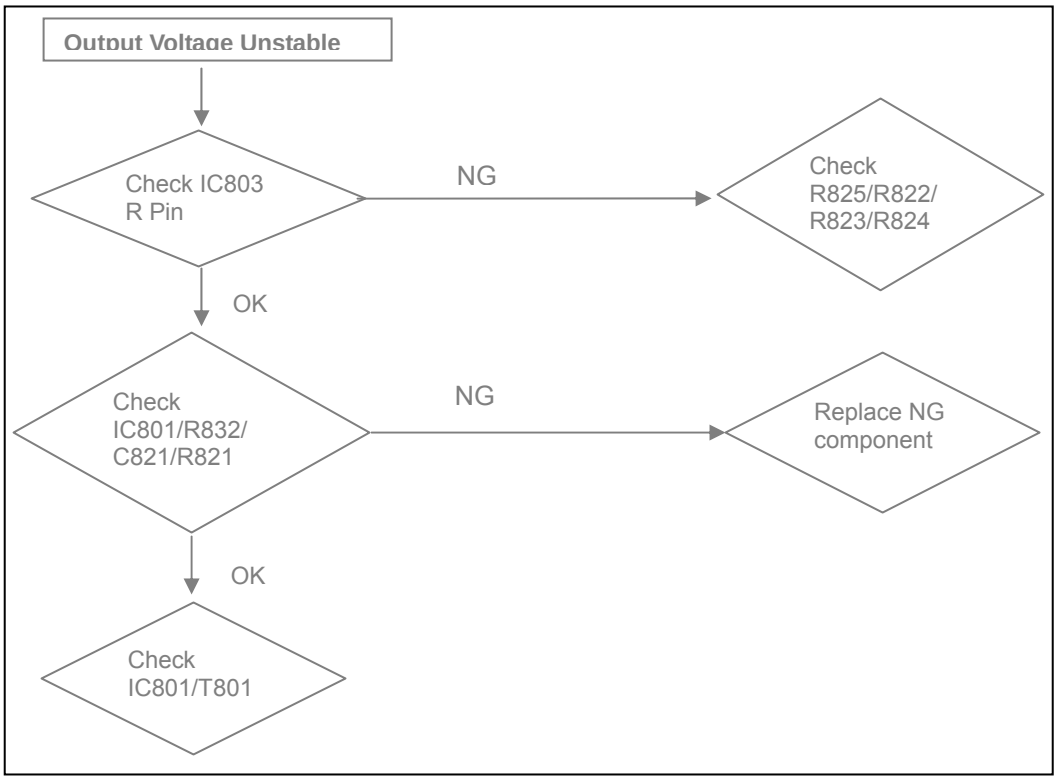
1. No Power & Power LED Off



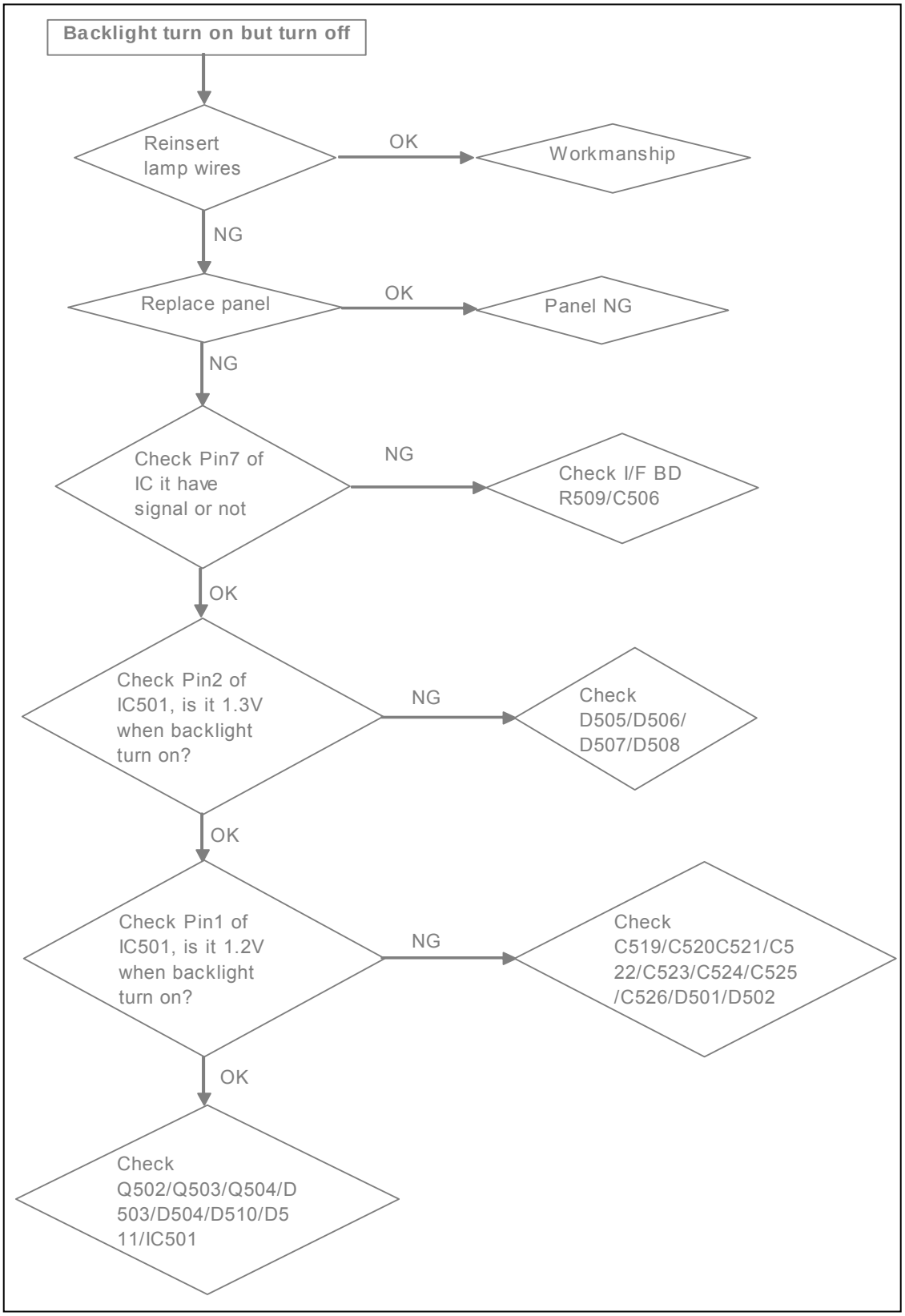
2. Backlight can’t be turned on



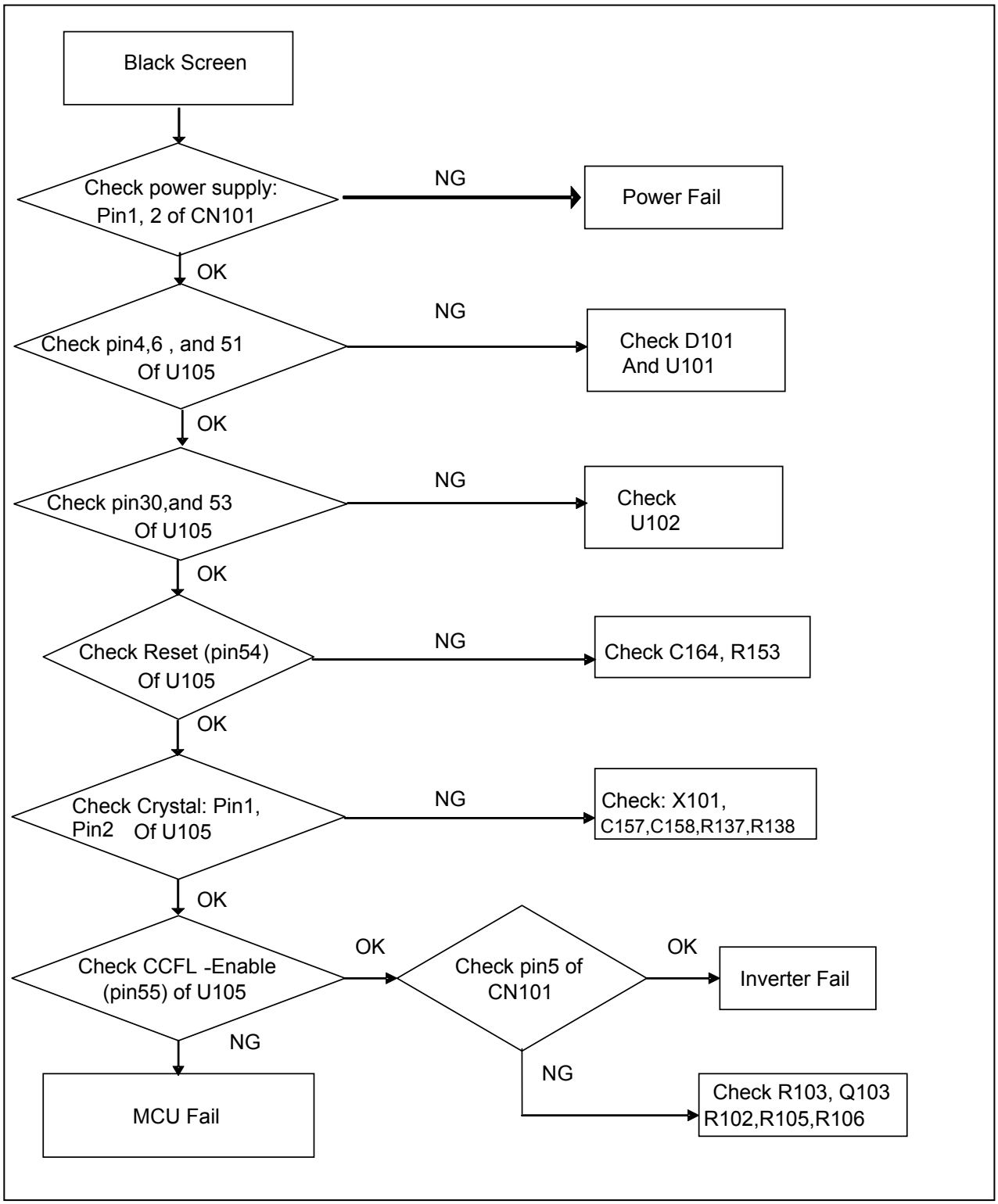
3. DC output voltage is unstable



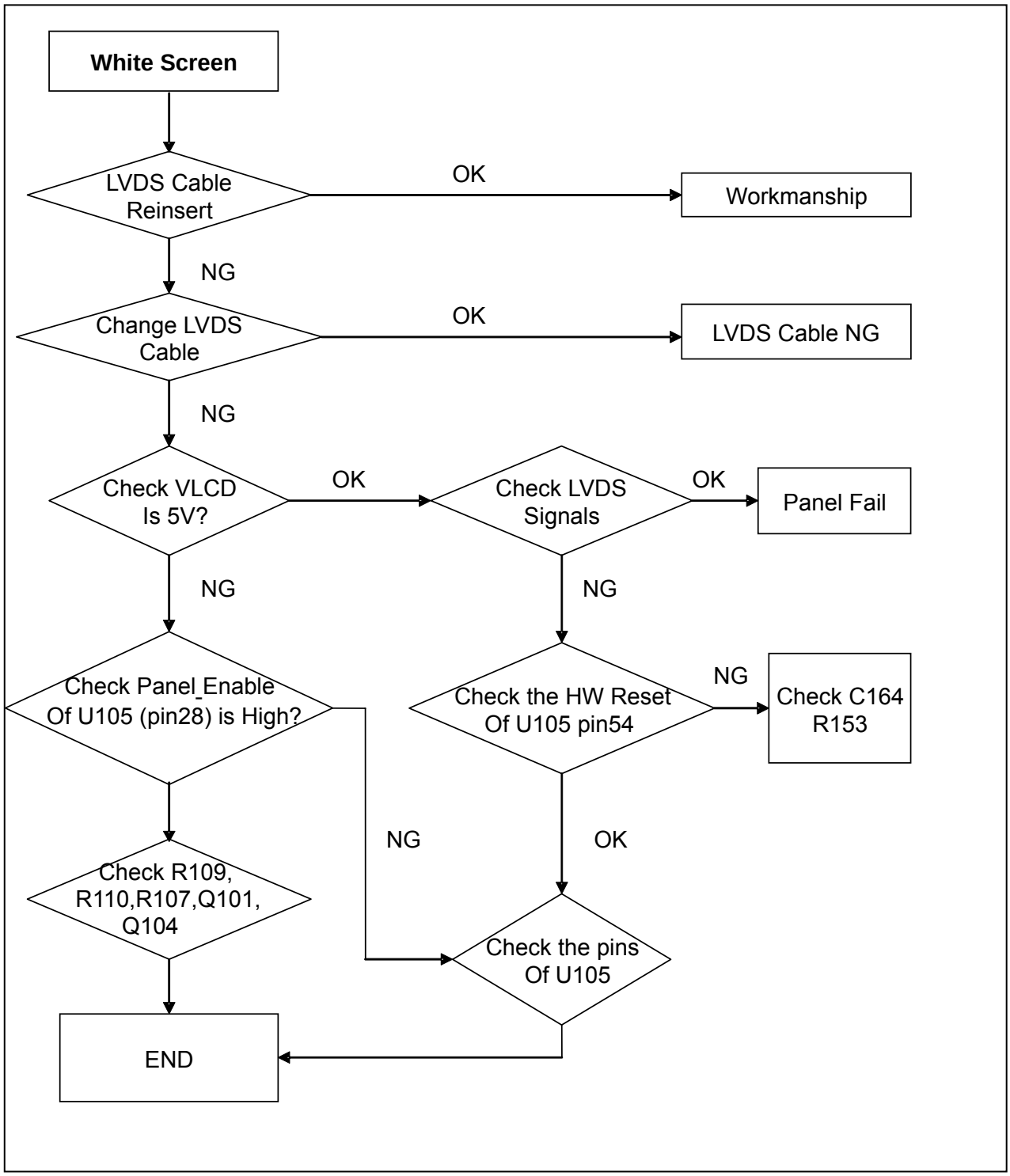
4. Backlight turn on and turn off soon



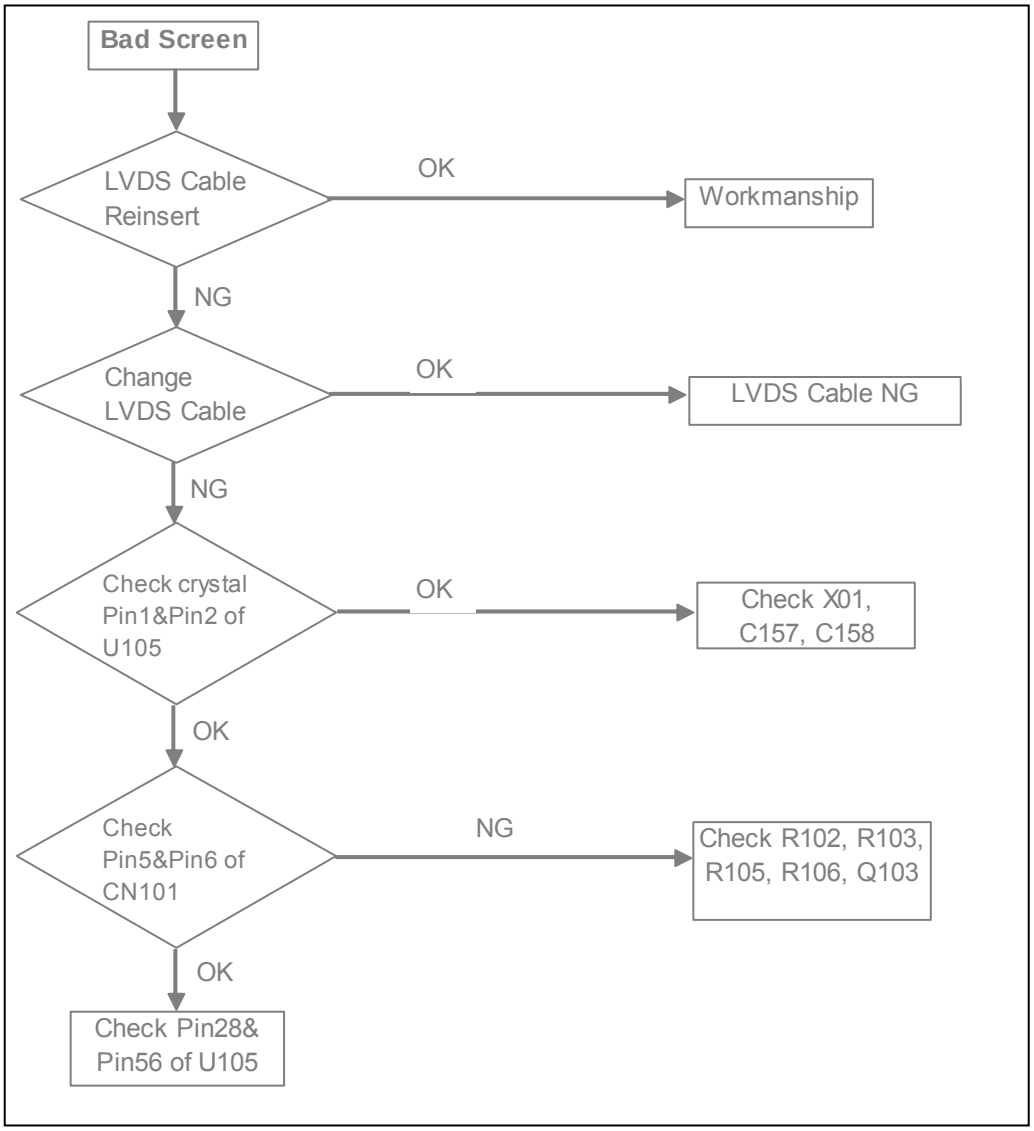
5. Black Screen and backlight turn on



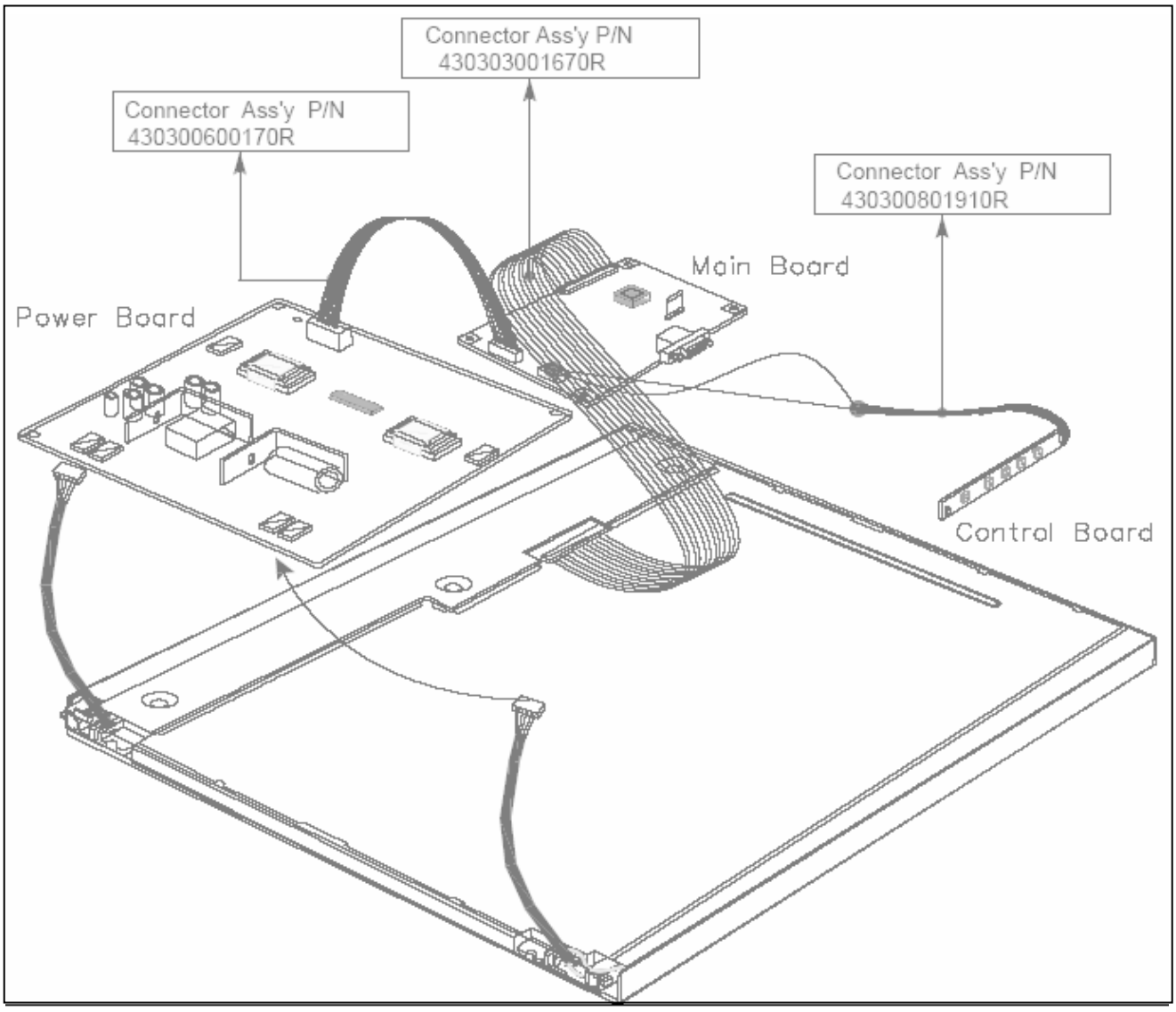
6. White Screen



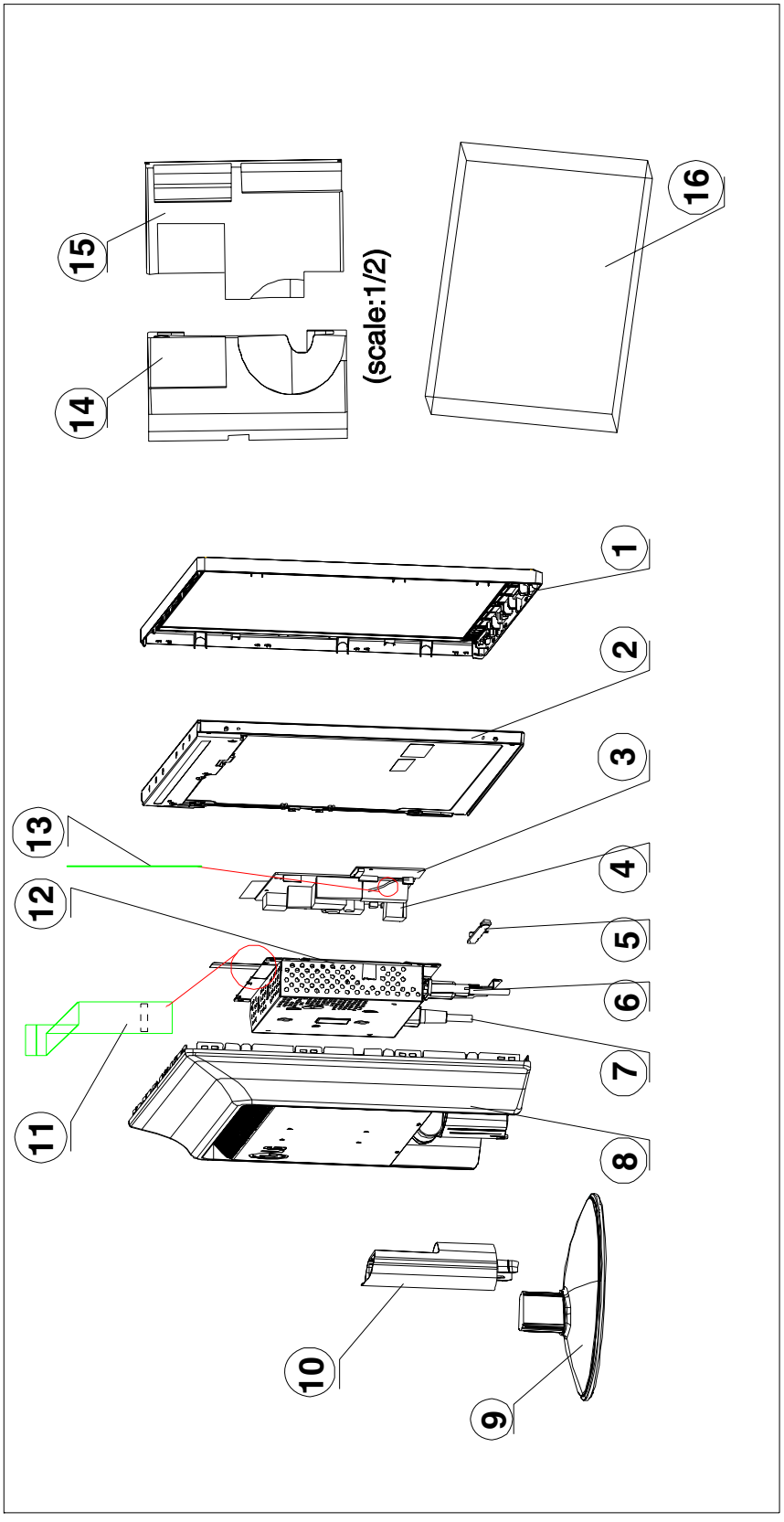
7. BAD SCREEN


Bad Screen
LVDS Cable Reinsert
OK
Workmanship
NG
Change LVDS Cable
OK
LVDS Cable NG
NG
Check crystal Pin1&Pin2 of U105
OK
Check X01, C157, C158
OK
Check Pin5&Pin6 of CN101
NG
Check R102, R103, R105, R106, Q103
OK
Check Pin28& Pin56 of U105

WIRING DIAGRAM



Exploded View and Parts List



Related to Models: W2234S-SNI/BNI.AxxIQP for 5ms InnoLux module and W2234S-SNI/BNI.AxxVQP for 5ms AUO Module

Item	LGE PN	INL PN	Descriptions	Usage	MOQ
1	ABJ66372001	714030016910R	ASSY,BEZEL,SILVER,LE22E2	1	20
	ABJ66372002	714030016900R	ASSY,BEZEL,BLACK,LE22E2	1	20
	ABJ66372003	714030016911R	ASSY,BEZEL,BLACK-CHINA,LE22E2	1	20
2	COV30039401	631102220411R	LCP 22"MT220WW01-V0-G1,AM2200001011 (INL)	1	20
	COV30039501	631102220180R	LCP 22" M220EW01-V0-000(A)ROHS (AUO)	1	20
3	COV30039601	791501300600R	PCBA,I/F BOARD,V0,W/O SPK,LE22E2-610 ROH (For INL)	1	20
	COV30039603	791501300601R	PCBA,I/F BOARD(V0,CHINA,W/O)LE22E2-610 ROHS (For INL)	1	20
	COV30039602	791501300700R	PCBA,I/F BOARD,W/O SPK,LE22E2-710 ROHS (For AUO)	1	20
	COV30039604	791501300701R	PCBA,I/F BOARD,(CHINA,W/O),LE22E2-710 ROHS (For AUO)	1	20
4	COV30039701	791501400600R	PCBA,P/I BOARD,W/O SPK,LE22E2-610 ROHS	1	20
5	COV30039801	791501500000R	PCBA,KEYPAD BOARD,LE22E2-610 ROHS	1	20
6	COV30007703	453010100340R	CABLE D-SUB 15P MALE 1850mm BLACK/BLUE R	1	20
7	6410TUW008A	453070800150R	PWR CORD 10A/125V BLK 6FT UL/CSA,SVT 3Cx --US/Mexico/Panama/Canada	1	20
	6410TBW004A	453070800720R	PWRCORD 10A/250V BLK 6FT UK,H05VV-F 3Cx0 --UK/Malaysia/Singapore	1	20
	6410TEW003A	453070800730R	PWRCORD 16A/250V BLK 6FT VDE,H05VV-F 3Cx ---Europe/Thailand/Vietnam/Russia/U.A.E	1	20
	6410TSW003A	453070800740R	PWRCORD 10A/250V BLK 1850mm SAA,H05W-F 3 ---Australia	1	20
	6410TTW001A	453070800750R	PWRCORD 7A/125V BLK 1850mm CNS,VCTF 3Gx0 ---Taiwan	1	20
8	ACQ66372301	714050015900R	ASSY,BACK COVER,LE22E2 (For INL)	1	20
	ACQ66372302	714050015901R	ASSY,BACK COVER,AUO,LE22E2 (For AUO)	1	20
9	AAN66372101	714020014000R	ASSY,BASE,LE22E2	1	20
10	MCK56884501	501260208100R	Stand Body,LE22E2	1	20
11	COV30040001	430303001670R	HRN LVDS FFC 30P 204.5mm	1	20
12	MDQ47252402	502090200000R	CHASSIS ANOLOG NO AUDIO,LE22E2	1	20
13	COV30039901	430300801910R	HRN ASSY 2x4P to 8P 280mm UL1571#28	1	20
14	MFZ55249301	506060009800R	CUSHION,EPS-Left, LE22E2	1	20
15	MFZ55249302	506060009810R	CUSHION,EPS-Right, LE22E2	1	20
16	MAY42295507	506020023602R	CARTON LG US/CANADA L2234S(LE22E2)	1	20
	MAY42295506	506020023600R	CARTON LG WW W2234S(LE22E2)	1	20
	MAY42295508	506020023601R	CARTON LG CHINA W2234S(LE22E2)	1	20

IF BOARD

1. FOR INL

ITEM	Location	P/N	Description	Usage	Un
		791501300600R	PCBA,I/F BOARD,V0,W/O SPK,LE22E2-610 ROH		
10		629030016500R	PROGRAM,V0,W/O SPK,LE22E2-610 ROHS	1	PC
20		791501340600R	PCBA,I/F BOARD,SMT,LE22E2-610 ROHS	1	PC
30		511130001200R	SOLDER BAR,Sn96.5/Ag3.0/Cu0.5/Ni0.06/Ge0	1.6	G
40	C109,C102,	420431010460R	CAP EC 100uF 16V M,105℃ ST 5x11,RoHS	2	PC
50	C103,C136,C138,	420432200460R	CAP EC 22uF 16V M,105℃ ST, 5x11,RoHS	3	PC
60	CN101,	430631060020R	WAFER 2.0mm 6P 180°,RoHS	1	PC
70	CN104,	430631080130R	WAFER 2x4P 2.0mm,200PHD-2*4ST RoHS	1	PC

80	X101,	432008010270R	XTAL 14.31818MHz HC-49US DIP 16pF 30PPM	1	PC
90	CN102,	440819015030R	CON D-SUB FEM.15P RA W/O SCREW DZ11AA1-H	1	PC
100	Q101,	410500068290R	XSTR AP2305GN P-CH SOT23(APEC) RoHS	1	PC
110		410060018380R	XSTR AM2321P-T1-PF P-CH SOT23(ANALOG POW	0	PC
120		410500075270R	XSTR AO3415 P-CH,SOT23(AOS) RoHS	0	PC
130	Q103,Q104,	410500045210R	XSTR PMBT3904 NPN 200MA,40V SOT23(PHILIP	2	PC
140		410500045140R	XSTR MMBT3904LT1G NPN 200MA 40V SOT23(ON	0	PC
150		410500045090R	XSTR MMBT3904 NPN SOT-23(PANJIT)RoHS	0	PC
160		410500045130R	XSTR MMBT3904 NPN SOT-23(INFIN EON)RoHS	0	PC
170	Q107,Q108,	410500046210R	XSTR PMBT3906 PNP 200MA,40V SOT23(PHILIP	2	PC
180		410500046180R	XSTR MMBT3906LT1G PNP 200mA 40V SOT23(ON	0	PC
190		410500046090R	XSTR MMBT3906 PNP SOT-23(PANJIT)RoHS	0	PC
200		410500046130R	XSTR MMBT3906 PNP SOT-23(INFIN EON)RoHS	0	PC
210	D102,D103, D104,D105,	411020026210R	DIO BAV99 350mW 70V SOT-23(PHI RoHS	4	PC
220		411020026090R	DIO BAV99 350mW 75V SOT-23(PEC RoHS	0	PC
230		411020026020R	DIO BAV99-LF 350mW 70V SOT-23 (FEC)RoHS	0	PC
240		411020026390R	DIO BAV99,SOT-23(INFINEON)RoHS	0	PC
250	ZD103,ZD104, ZD105,ZD106,	411100962920R	ZENER 6.2V BZT52-B6V2S SOD323(PEC)RoHS	4	PC
260		411101762950R	ZENER 6.2V MMPZ5234BPT SOD323(Chenmko)Ro	0	PC
270		411101562950R	ZENER 6.2V BZT52C6V2S SOD323(Diodes)RoHS	0	PC
280	U101,	412000599490R	IC MT11173.3A SOT223(Matrix)RoHS	1	PC
290		412000372830R	IC AS1117L-3.3TR-LF,SOT223(A1S EMI)RoHS	0	PC
300		412000372070R	IC AZ1117H-3.3 SOT-223(AAC)RoHS	0	PC
310	U102,	412000598490R	IC MT11171.8A SOT223(Matrix) RoHS	1	PC
320		412000330830R	IC AS1117L-1.8/TR-LF,SOT223(A1 SEMI)RoHS	0	PC
330		412000330070R	IC AZ1117H-1.8 SOT223(AAC)RoHS	0	PC
340	U105,	412000649060R	IC TSUMU18ER-LF LQFP64 (MSTAR) ROHS	1	PC
350	U108,	412000486310R	IC PM25LV010A-100SCE SOIC8(PMC)RoHS	1	PC
360		412000373190R	IC SST25VF010A-33-4C-SAE,SOIC- 8(SST)RoH	0	PC
370		412000499620R	IC MX25L1005AMC-12G SOP8(MXIC)RoHS	0	PC
380	R121,	414918000050R	RES SMD (0402) 0Ω J,RT,RoHS	1	PC
390	RB101,RB102, RB103,	414916000050R	RES SMD (0603) 0Ω J,RT RoHS	3	PC
400	R132,R131,	414918010150R	RES SMD (0402) 100Ω J,RT,RoHS	2	PC
410	R133,R134,R141, R154,R155,R156, R171,R191,R130,	414918010250R	RES SMD (0402) 1KΩ J,RT,RoHS	9	PC
420	R102,R103,R140, R142,R143,R144, R147,R148,R166, R177,R190,R192, R106,R129,R169, R176,	414918010350R	RES SMD (0402) 10KΩ J,RT,RoHS	16	PC
430	R107,R109,R153,	414918010450R	RES SMD (0402)100KΩ J,RT,RoHS	3	PC
440	R135,R136,	414918022250R	RES SMD (0402) 2.2KΩ J,RT,RoHS	2	PC
450	R165,	414916033150R	RES SMD (0603) 330Ω J,RT RoHS	1	PC
460	R125,	414918039150R	RES SMD (0402) 390Ω J,RT,RoHS	1	PC
470	R114,R115,R116,	414918470910R	RES SMD (0402) 47Ω F,RT,RoHS	3	PC

480	R172,	414918047150R	RES SMD (0402) 470Ω J,RT,RoHS	1	PC
490	R105,R110, R127,R128,	414918047250R	RES SMD (0402) 4.7KΩ J,RT,RoHS	4	PC
500	R108,	414918047350R	RES SMD (0402) 47KΩ J,RT,RoHS	1	PC
510	R117,R118,R119,	414918750910R	RES SMD (0402) 75Ω F,RT,RoHS	3	PC
520	R122,R123,R124,	414918845910R	RES SMD (0402) 84.5Ω F,RT,RoHS	3	PC
530	R168,	414916068150R	RES SMD (0603) 680Ω J,RT RoHS REV:A	1	PC
540	C104,C106,C108, C110,C113,C114, C115,C119,C120, C121,C134,C135, C137,C139,C165, C168,C169,C171, C172,C173,C128, C105,C122,C123, C124,C125,	419351044010R	C SMD(0402) X5R 0.1uF/16V K,RoHS	26	PC
550	C112,C140,C164,	419311054070R	C SMD(0805) X7R 1uF/16V K RoHS REV:A	3	PC
560	C158,C157,	419301000510R	C SMD(0402) NPO 10PF/50V J,RoHS	2	PC
570	C130,C129,	419303300510R	C SMD(0402) NPO 33PF/50V J,RoHS	2	PC
580	C143,	419314734010R	C SMD(0402) X7R 0.047uF/16V K,RoHS	1	PC
590	EP101,EP102,	432002500020R	ESD SMD(0603) 5P/35V(INPAQ) OSC-03-09-03	2	PC
600		432009500080R	VARIST ESD SMD(0603) 5P/62V(LTR) LVSL161	0	PC
610	FB101,	432002312144R	BEAD CORE SMD(0603)120Ω 300mA SBK160808	1	PC
620	FB104,FB103, FB102,	432002360140R	BEAD CORE SMD(0603)60Ω 600mA, GBK160808	3	PC
630	CN103,	444099030030R	CON, SMD 1.0mm 30PIN RoHS AL2309-A0G1Z	1	PC
640		506440003800R	LABEL,BLANK,YELLOW,10x4mm	1	PC
650		506140005700R	LABEL,BARCODE,BLANK,33x7mm, ROHS,FOR PCB	1	PC
660	D101,	411090005451R	SCHTKY SSM24APT 40V/2A SMA-S(CHENMKO)RoH	1	PC
670		411090005311R	SCHTKY B240A 40V/2A SMA(DIODES RoHS	0	PC
680		411090005460R	SCHTKY SM240A-LF 40V/2A DO-214AC(SECOS)	0	PC
690	U103,	412000435481R	IC AT24C02BN-SH-T 2K SOIC8(ATMEL)RoHS	1	PC
700		412000480280R	IC M24C02-RMN6TP SO8(ST)RoHS	0	PC
710		412000480990R	IC CAT24C02WI-TE13 SOIC-8(CATALYST)RoHS	0	PC
720	D106,	411020047210R	DIO BAV70 85V SOT23 (PHILIPS) RoHS	1	PC
730		411020047020R	DIO BAV70-LF, 70V SOT-23(FEC) ROHS	0	PC
740		411020047090R	DIO BAV70, 70V SOT-23(PEC) ROHS	0	PC
750		491441300100R	PCB,I/F BOARD,LE22E2-X10 ROHS	1	PC
760	C175,	419311020010R	C SMD(0402) X7R 1000PF/50V K,RoHS	1	PC
770	R137,	414918033150R	RES SMD (0402) 330Ω J,RT,RoHS	1	PC
780	R138,	414918033050R	RES SMD (0402) 33Ω J,RT,RoHS	1	PC
790		511130002200R	SOLDER PASTE,Sn96.5-Ag3.0-Cu0.5 ROHS	0.385	G
800		511130002201R	SOLDER PASTE,Sn96.5%Ag3.0%Cu0.5%	0	G
810		511130002202R	SOLDER PASTE,Sn95.5%Ag3.9%Cu0.6%	0	G

2. FOR AUO

ITEM	Location	P/N	Description	Usage	Un
		791501300700R	PCBA,I/F BOARD,W/O SPK,LE22E2-710 ROHS		
10		629030016510R	PROGRAM,W/O SPK,LE22E2-710 ROHS	1	PC
20		791501320600R	PCBA,I/F BOARD,MI,LE22E2-610 ROHS	1	PC

30		791501340600R	PCBA,I/F BOARD,SMT,LE22E2-610 ROHS	1	PC
40		511130001200R	SOLDER BAR,Sn96.5/Ag3.0/Cu0.5/Ni0.06/Ge0	1.6	G
50	C109,C102,	420431010460R	CAP EC 100uF 16V M,105℃ ST 5x11,RoHS	2	PC
60	C103,C136,C138,	420432200460R	CAP EC 22uF 16V M,105℃ ST, 5x11,RoHS	3	PC
70	CN101,	430631060020R	WAFER 2.0mm 6P 180°,RoHS	1	PC
80	CN104,	430631080130R	WAFER 2x4P 2.0mm,200PHD-2*4ST RoHS	1	PC
90	X101,	432008010270R	XTAL 14.31818MHz HC-49US DIP 16pF 30PPM	1	PC
100	CN102,	440819015030R	CON D-SUB FEM.15P RA W/O SCREW DZ11AA1-H	1	PC
110	Q101,	410500068290R	XSTR AP2305GN P-CH SOT23(APEC) RoHS	1	PC
120		410060018380R	XSTR AM2321P-T1-PF P-CH SOT23(ANALOG POW	0	PC
130		410500075270R	XSTR AO3415 P-CH,SOT23(AOS) RoHS	0	PC
140	Q103,Q104,	410500045210R	XSTR PMBT3904 NPN 200MA,40V SOT23(PHILIP	2	PC
150		410500045140R	XSTR MMBT3904LT1G NPN 200MA 40V SOT23(ON	0	PC
160		410500045090R	XSTR MMBT3904 NPN SOT-23(PANJIT)RoHS	0	PC
170		410500045130R	XSTR MMBT3904 NPN SOT-23(INFIN EON)RoHS	0	PC
180	Q107,Q108,	410500046210R	XSTR PMBT3906 PNP 200MA,40V SOT23(PHILIP	2	PC
190		410500046180R	XSTR MMBT3906LT1G PNP 200mA 40V SOT23(ON	0	PC
200		410500046090R	XSTR MMBT3906 PNP SOT-23(PANJIT)RoHS	0	PC
210		410500046130R	XSTR MMBT3906 PNP SOT-23(INFIN EON)RoHS	0	PC
220	D102,D103, D104,D105,	411020026210R	DIO BAV99 350mW 70V SOT-23(PHI RoHS	4	PC
230		411020026090R	DIO BAV99 350mW 75V SOT-23(PEC RoHS	0	PC
240		411020026020R	DIO BAV99-LF 350mW 70V SOT-23 (FEC)RoHS	0	PC
250		411020026390R	DIO BAV99,SOT-23(INFINEON)RoHS	0	PC
260	ZD103,ZD104, ZD105,ZD106,	411100962920R	ZENER 6.2V BZT52-B6V2S SOD323(PEC)RoHS	4	PC
270		411101762950R	ZENER 6.2V MMPZ5234BPT SOD323(Chenmko)Ro	0	PC
280		411101562950R	ZENER 6.2V BZT52C6V2S SOD323(Diodes)RoHS	0	PC
290	U101,	412000599490R	IC MT11173.3A SOT223(Matrix)RoHS	1	PC
300		412000372830R	IC AS1117L-3.3TR-LF,SOT223(A1S EMI)RoHS	0	PC
310		412000372070R	IC AZ1117H-3.3 SOT-223(AAC)RoHS	0	PC
320	U102,	412000598490R	IC MT11171.8A SOT223(Matrix) RoHS	1	PC
330		412000330830R	IC AS1117L-1.8/TR-LF,SOT223(A1 SEMI)RoHS	0	PC
340		412000330070R	IC AZ1117H-1.8 SOT223(AAC)RoHS	0	PC
350	U105,	412000649060R	IC TSUMU18ER-LF LQFP64 (MSTAR) ROHS	1	PC
360	U108,	412000486310R	IC PM25LV010A-100SCE SOIC8(PMC)RoHS	1	PC
370		412000373190R	IC SST25VF010A-33-4C-SAE,SOIC- 8(SST)RoH	0	PC
380		412000499620R	IC MX25L1005AMC-12G SOP8(MXIC)RoHS	0	PC
390	R121,	414918000050R	RES SMD (0402) 0Ω J,RT,RoHS	1	PC
400	RB101,RB102, RB103,	414916000050R	RES SMD (0603) 0Ω J,RT RoHS	3	PC
410	R132,R131,	414918010150R	RES SMD (0402) 100Ω J,RT,RoHS	2	PC
420	R133,R134,R141, R154,R155,R156, R171,R191,R130,	414918010250R	RES SMD (0402) 1KΩ J,RT,RoHS	9	PC

430	R102,R103,R140, R142,R143,R144, R147,R148,R166, R177,R190,R192, R106,R129,R169, R176,	414918010350R	RES SMD (0402) 10KΩ J,RT,RoHS	16	PC
440	R107,R109,R153,	414918010450R	RES SMD (0402)100KΩ J,RT,RoHS	3	PC
450	R135,R136,	414918022250R	RES SMD (0402) 2.2KΩ J,RT,RoHS	2	PC
460	R165,	414916033150R	RES SMD (0603) 330Ω J,RT RoHS	1	PC
470	R125,	414918039150R	RES SMD (0402) 390Ω J,RT,RoHS	1	PC
480	R114,R115,R116,	414918470910R	RES SMD (0402) 47Ω F,RT,RoHS	3	PC
490	R172,	414918047150R	RES SMD (0402) 470Ω J,RT,RoHS	1	PC
500	R105,R110, R127,R128,	414918047250R	RES SMD (0402) 4.7KΩ J,RT,RoHS	4	PC
510	R108,	414918047350R	RES SMD (0402) 47KΩ J,RT,RoHS	1	PC
520	R117,R118,R119,	414918750910R	RES SMD (0402) 75Ω F,RT,RoHS	3	PC
530	R122,R123,R124,	414918845910R	RES SMD (0402) 84.5Ω F,RT,RoHS	3	PC
540	R168,	414916068150R	RES SMD (0603) 680Ω J,RT RoHS REV:A	1	PC
550	C104,C106,C108, C110,C113,C114, C115,C119,C120, C121,C134,C135, C137,C139,C165, C168,C169,C171, C172,C173,C128, C105,C122,C123, C124,C125,	419351044010R	C SMD(0402) X5R 0.1uF/16V K,RoHS	26	PC
560	C112,C140,C164,	419311054070R	C SMD(0805) X7R 1uF/16V K RoHS REV:A	3	PC
570	C158,C157,	419301000510R	C SMD(0402) NPO 10PF/50V J,RoHS	2	PC
580	C130,C129,	419303300510R	C SMD(0402) NPO 33PF/50V J,RoHS	2	PC
590	C143,	419314734010R	C SMD(0402) X7R 0.047uF/16V K,RoHS	1	PC
600	EP101,EP102,	432002500020R	ESD SMD(0603) 5P/35V(INPAQ) OSC-03-09-03	2	PC
610		432009500080R	VARIST ESD SMD(0603) 5P/62V(LTR) LVSL161	0	PC
620	FB101,	432002312144R	BEAD CORE SMD(0603)120Ω 300mA SBK160808	1	PC
630	FB104,FB103, FB102,	432002360140R	BEAD CORE SMD(0603)60Ω 600mA, GBK160808	3	PC
640	CN103,	444099030030R	CON, SMD 1.0mm 30PIN RoHS AL2309-A0G1Z	1	PC
650		506440003800R	LABEL,BLANK,YELLOW,10x4mm	1	PC
660		506140005700R	LABEL,BARCODE,BLANK,33x7mm, ROHS,FOR PCB	1	PC
670	D101,	411090005451R	SCHTKY SSM24APT 40V/2A SMA-S(CHENMKO)RoH	1	PC
680		411090005311R	SCHTKY B240A 40V/2A SMA(DIODES RoHS	0	PC
690		411090005460R	SCHTKY SM240A-LF 40V/2A DO-214AC(SECOS)	0	PC
700	U103,	412000435481R	IC AT24C02BN-SH-T 2K SOIC8(ATMEL)RoHS	1	PC
710		412000480280R	IC M24C02-RMN6TP SO8(ST)RoHS	0	PC
720		412000480990R	IC CAT24C02WI-TE13 SOIC-8(CATALYST)RoHS	0	PC
730	D106,	411020047210R	DIO BAV70 85V SOT23 (PHILIPS) RoHS	1	PC
740		411020047020R	DIO BAV70-LF, 70V SOT-23(FEC) ROHS	0	PC
750		411020047090R	DIO BAV70, 70V SOT-23(PEC) ROHS	0	PC
760		491441300100R	PCB,I/F BOARD,LE22E2-X10 ROHS	1	PC
770	C175,	419311020010R	C SMD(0402) X7R 1000PF/50V K,RoHS	1	PC

780	R137,	414918033150R	RES SMD (0402) 330Ω J,RT,RoHS	1	PC
790	R138,	414918033050R	RES SMD (0402) 33Ω J,RT,RoHS	1	PC
800		511130002200R	SOLDER PASTE,Sn96.5-Ag3.0-Cu0.5 ROHS	0.385	G
810		511130002201R	SOLDER PASTE,Sn96.5%Ag3.0%Cu0.5%	0	G
820		511130002202R	SOLDER PASTE,Sn95.5%Ag3.9%Cu0.6%	0	G

Power Board

FOR INL&AUO

ITEM	Location	P/N	Description	Usage	Un
		791501400600R	PCBA,P/I BOARD,W/O SPK,LE22E2-610 ROHS		
10	D801,	411050005021R	DIO BRDG BL4-06-G-BF52-LF 600V/4A(FEC)Ro	1	PC
20		411050006041R	DIO BRDG KBL06M 600V/4A(MOSPEC RoHS	0	PC
30		411050007010R	DIO BRDG KBL405G 600V/4A(TSC) RoHS	0	PC
40	IC801,	412140002380R	IC LTV817M-PR VDE (LITE-ON) P=10mm RoHS	1	PC
50		412140001390R	IC EL817M-B(EVERLIGHT)RoHS	0	PC
60	R815,	415350438520R	RES MOF 2W 0.43Ω J,VF MINI, RoHS	1	PC
70	C805,	416202224610R	CAP MEY 2200pF 400V M Y,F10mm RoHS	1	PC
80	C828,	416204724610R	CAP MEY 4700pF 400V M Y,F10mm RoHS	1	PC
90	C806,	416304724510R	CAP PP 0.0047uF 400V J,F5,RoHS	1	PC
100	C801,C802,	416201024620R	CAP MEY 1000pF 400V M Y1,W/O F ORMING,Ro	2	PC
110	C803,	416194743011R	CAP MEX 0.47uF 275V K X2,F15 RoHS	1	PC
120	C519,C521, C523,C525,	418110058520R	CAP CD SL 10pF 3KV J,S7.5 RoHS	4	PC
130		418110051520R	CAP CD NPO 10pF 3KV J,S7.5, RoHS	0	PC
140	C804,	420431514582R	CAP SEK 150UF/450V M,105℃ CF,18X45(BLUE	1	PC
150	L801,	425000010670R	COIL CHK 20mH UU16 CHK-067,RoH S,UF2324S	1	PC
160	L802,L803,L804,	425000010530R	COIL CHK 5uH 7.8X10 CHK-053 0 181085R0L	3	PC
170	T501,T502,	426000091100H	XFMR SW DIP EEL19 P4 335mH SPW-110	2	PC
180	T801,	426000091000R	XFMR SW DIP ER28 PC40 650uH SPW-100 RoHS	1	PC
190	CN501,CN502, CN503,CN504,	430637020030R	WFR. 2P P=3.5mm 90°W/LOCK,RoHS	4	PC
200	CN801,	430300600170R	HRN ASS'Y 6P 90mm UL1007#24 ROHS	1	PC
210	F801,	430613430290R	FUSE SLOW 3.15,250,Axial Lead,3.6 x10mm	1	PC
220	RT801,	432009401300R	NTC 8Ω 4A 13Φ P＝7.5mm F ROHS	1	PC
230	P801,	440149000221R	SKT AC 10A/250V U/C/V,ROHS	1	PC
240	H501,	502040603200R	SHIELD TRANSFORMER LE1703 RoHS	1	PC
250		735110006920R	ASSY,H/S,AP2761I-A,LE22E2-610 ROHS	1	PC
260		735110006900R	ASSY,H/S,SRF1050C/SRF1060C,LE22E2 ROHS	1	PC
270		791501440600R	PCBA,P/I BOARD,SMT,W/O,LE22E2-610 ROHS	1	PC
280	R831,	415350101550R	RES MOF 2W 100Ω J,MINI,HK15, RoHS	1	PC
290	C817,C818,	420426810261R	CAP SD 680UF/25V M 105℃ ST 10X20 ROHS	2	PC
300		511110000101R	HOT-MELT ADHESIVES (#526)	1.335	G
310		511110000103R	HOT-MELT ADHESIVES,UB-618	0	G
320		511110000501R	SILICONE RTV RUBBER,UB-511(EURO)	0.45	G
330		511130001200R	SOLDER BAR,Sn96.5/Ag3.0/Cu0.5/Ni0.06/Ge0	7.98	G
340	D804,	411090023040R	SCHTKY SRF10150C 150V/10A ITO2 20(MOSPEC	1	PC
350		411090023020R	SCHTKY SRF10-15CT-LF 150V/10A(FEC)RoHS	0	PC
360		411090023090R	SCHTKY SB10150FCT 150V/10A ITO 220AB(PAN	0	PC
370	D805,	411090012020R	SCHTKY SRF10-06CT-LF 60V/10FEC ITO-220AB	1	PC

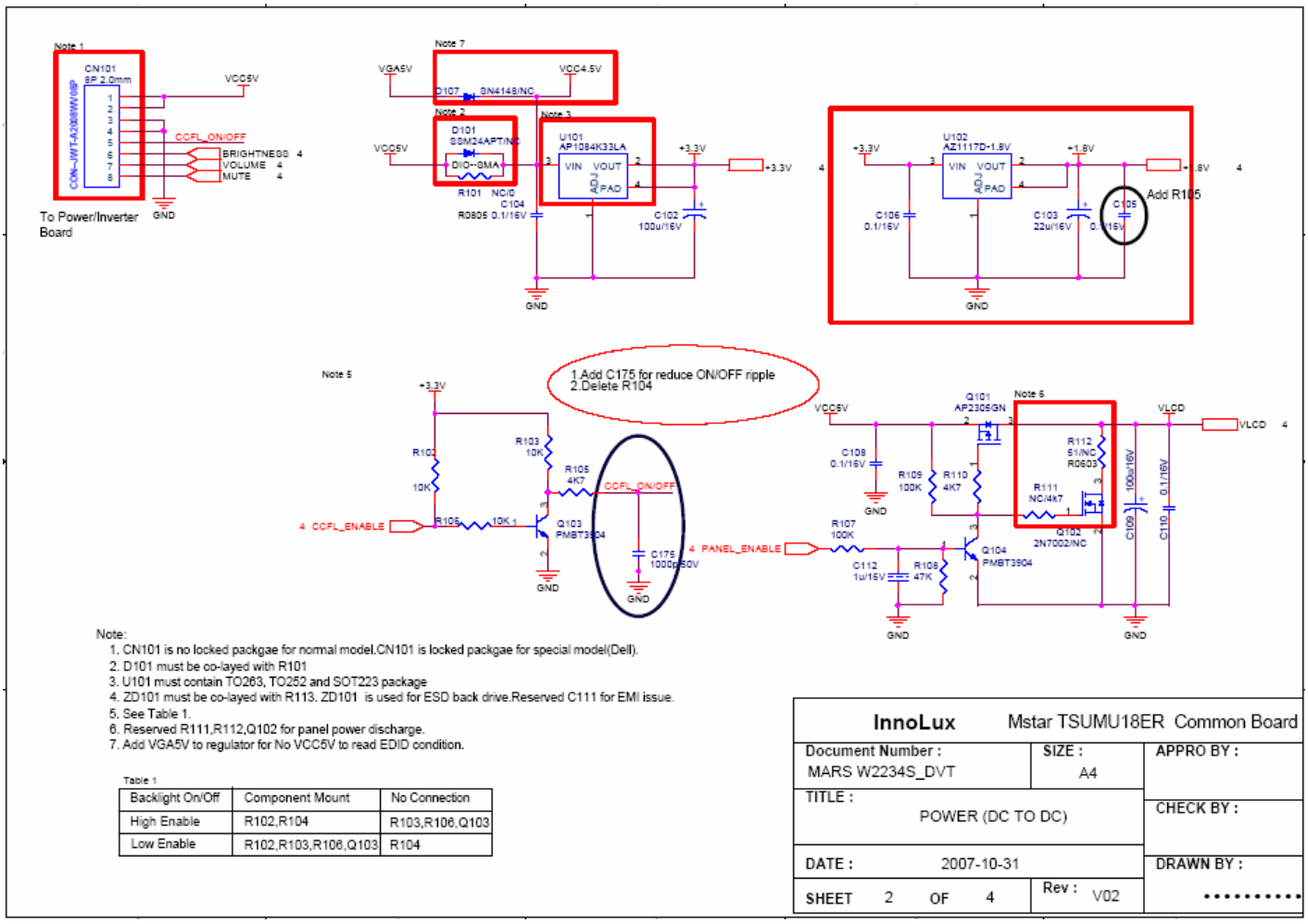
380		411090011040R	SCHTKY SRF1060C 60V/10A ITO220 (MOSPEC)R	0	PC
390		411090011090R	SCHTKY SB1060FCT 60V/10A ITO 220AB(PANJI	0	PC
400		507200003800R	HEATSINK,56x20xt10mm LE1904/05	1	PC
410		509112306100R	SCREW,P,CROSS,T.T-3*6,ZnROHS	2	PC
420	Q804,	410050102290R	XSTR AP2763I-A N-CH TO-220CFM (APEC) RoH	1	PC
430		410050057280R	XSTR STP8NK80ZFP N-CH TO220FP (ST)	0	PC
440		410050101050R	2SK3264-01MR N-CH TO-220F15 (FUJI) RoHS	0	PC
450		507200003700R	HEATSINK,46x20xt10mm LE1704/05	1	PC
460		509112306100R	SCREW,P,CROSS,T.T-3*6,ZnROHS	1	PC
470	Q501,Q503,	410500045210R	XSTR PMBT3904 NPN 200MA,40V SOT23(PHILIP	2	PC
480		410500045140R	XSTR MMBT3904LT1G NPN 200MA 40V SOT23(ON	0	PC
490		410500045090R	XSTR MMBT3904 NPN SOT-23(PANJIT)RoHS	0	PC
500		410500045130R	XSTR MMBT3904 NPN SOT-23(INFIN EON)RoHS	0	PC
510	Q505,	410500046210R	XSTR PMBT3906 PNP 200MA,40V SOT23(PHILIP	1	PC
520		410500046180R	XSTR MMBT3906LT1G PNP 200mA 40V SOT23(ON	0	PC
530		410500046090R	XSTR MMBT3906 PNP SOT-23(PANJIT)RoHS	0	PC
540		410500046130R	XSTR MMBT3906 PNP SOT-23(INFIN EON)RoHS	0	PC
550	Q502,Q504, Q506,	410500050230R	XSTR RK7002 ESD N-C SOT-23 (ROHM)RoHS	3	PC
560		410500050120R	XSTR 2N7002K ESD N-C SOT-23, (VISHAY)RoH	0	PC
570		410500050212R	XSTR 2N7002K01 ESD N-C SOT-23(PHILIPS)R	0	PC
580	U501,	410050104290R	XSTR AP9971GH,N-CH,TO252(APEC) ROHS	1	PC
590		410050105270R	XSTR AOD442 N-Ch TO-252(AOS) ROHS	0	PC
600	U502,	410060019290R	XSTR AP9575GH P-CH,TO252(APEC) ROHS	1	PC
610		410060020270R	XSTR AOD407 P-Ch TO-252(AOS) ROHS	0	PC
620	D501,D502,	411020047210R	DIO BAV70 85V SOT23 (PHILIPS) RoHS	2	PC
630		411020047020R	DIO BAV70-LF, 70V SOT-23(FEC) ROHS	0	PC
640		411020047090R	DIO BAV70, 70V SOT-23(PEC) ROHS	0	PC
650	D503,D504,	411020068020R	DIO BAW56 70V SOT-23(FRONTIER)RoHS	2	PC
660		411020068090R	DIO BAW56 75V SOT-23(PANJIT)RoHS	0	PC
670		411020068210R	DIO BAW56 85V SOT-23(PHILIPS)RoHS	0	PC
680	D505,D506, D507,D508, D510,D511, D512,	411023004021R	DIO SN4148-LF 75V/0.15A SMD 1206 (FEC)Ro	7	PC
690		411020046090R	DIO 1N4148W 75V/0.15A(PEC)RoHS SOD-123	0	PC
700		411020046310R	DIO 1N4148W-F 75V/0.15A(DIODES RoHS,SOD-	0	PC
710	ZD801,	411130918020R	ZENER 18V MMSZ5248A SOD-123(PANJIT)ROHS	1	PC
720		411131418020R	ZENER 18V MMSZ5248A SOD-123(WILLAS)ROHS	0	PC
730	IC501,	412000549720R	IC MP1008ES SOIC16(MPS)ROHS	1	PC
740	IC802,	412000620820R	IC LD7522PS SOP-8(Leadtrend) Rohs	1	PC
750	R513,	414916010050R	RES SMD (0603) 10Ω J,RT RoHS	1	PC
760	R828,R512,	414904010050R	RES SMD (1206) 10Ω J,RT RoHS	2	PC
770	R816,	414908100110R	RES SMD (0805) 1KΩ F,RT RoHS REV:A	1	PC
780	R509,R510, R518,R520,	414916100210R	RES SMD (0603) 10KΩ F,RT RoHS	4	PC
790	R502,	414916120210R	RES SMD (0603) 12KΩ F,RT,RoHS	1	PC
800	R544,	414916560210R	RES SMD (0603) 56KΩ F,RT RoHS	1	PC
810	R814,R829,	414908010350R	RES SMD (0805) 10KΩ J,RT RoHS REV:A	2	PC
820	R505,R511,	414916100310R	RES SMD (0603) 100KΩ F,RT RoHS	2	PC

830	R504,R519,R525,	414916010550R	RES SMD (0603) 1MΩ J,RT RoHS REV:A	3	PC
840	R823,R819,	414908100310R	RES SMD (0805) 100KΩ F,RT,RoHS	2	PC
850	R506,	414916150310R	RES SMD (0603) 150KΩ F,RT RoHS	1	PC
860	R806,R807,R808,	414904082350R	RES SMD (1206) 82KΩ J,RT RoHS	3	PC
870	R822,	414908154210R	RES SMD (0805) 15.4KΩ F,RT RoHS	1	PC
880	R830,	414908020150R	RES SMD (0805) 200Ω J,RT RoHS	1	PC
890	R527,R528, R529,R530,	414916200210R	RES SMD (0603) 20KΩ F,RT RoHS	4	PC
900	R539,R542,	414908200210R	RES SMD (0805) 20KΩ F,RT,RoHS	2	PC
910	R543,	414916220110R	RES SMD (0603) 2.2KΩ F,RT RoHS	1	PC
920	R821,	414908022250R	RES SMD (0805) 2.2KΩ J,RT RoHS	1	PC
930	R517,	414916220310R	RES SMD (0603) 220KΩ F,RT RoHS	1	PC
940	R812,	414908300310R	RES SMD (0805) 300KΩ F,RT RoHS REV:A	1	PC
950	R809,R810,R811,	414904030550R	RES SMD (1206) 3MΩ J,RT RoHS	3	PC
960	R825,	414908820210R	RES SMD (0805) 82KΩ F,RT RoHS	1	PC
970	R801,R802,R803,	414904033450R	RES SMD (1206) 330KΩ J,RT RoHS	3	PC
980	R514,	414916680210R	RES SMD (0603) 68KΩ F,RT RoHS	1	PC
990	R832,	414904022150R	RES SMD (1206) 220Ω J,RT,RoHS	1	PC
1000	R501,	414908051150R	RES SMD (0805) 510Ω J,RT RoHS REV:A	1	PC
1010	R521,R522,	414916075350R	RES SMD (0603) 75KΩ J,RT RoHS	2	PC
1020	R535,R536, R537,R538,	414908820010R	RES SMD (0805) 820Ω F,RT RoHS	4	PC
1030	C814,C812,	419301010560R	C SMD(0603) NPO 100PF/50V J RoHS	2	PC
1040	C813,	419311020070R	C SMD(0805) X7R 1000PF/50V K RoHS	1	PC
1050	C507,	419311030060R	C SMD(0603) X7R 0.01uF/50V K RoHS	1	PC
1060	C517,C518, C827,C826,	419311040060R	C SMD(0603) X7R 0.1uF/50V K RoHS	4	PC
1070	C810,C510,	419311040070R	C SMD(0805) X7R 0.1uF/50V K RoHS REV:A	2	PC
1080	C508,	419311054070R	C SMD(0805) X7R 1uF/16V K RoHS REV:A	1	PC
1090	C504,	419341064650R	C SMD(1206) Y5V 10uF/16V Z RoHS	1	PC
1100	C506,	419302210560R	C SMD(0603) NPO 220PF/50V J RoHS	1	PC
1110	C811,	419312254070R	C SMD(0805) X7R 2.2uF 16V K RoHS	1	PC
1120	C516,	419312253050R	C SMD(1206) X7R 2.2uF/25V K RoHS	1	PC
1130	C503,	419313320060R	C SMD(0603) X7R 3300PF/50V K RoHS	1	PC
1140	C825,	419314710070R	C SMD(0805) X7R 470PF/50V K RoHS	1	PC
1150	C520,C522, C524,C526,	419314720070R	C SMD(0805) X7R 4700PF/50V K ROHS	4	PC
1160	C511,	419314730070R	C SMD(0805) X7R 0.047uF/50V K ROHS	1	PC
1170	FB801,	432002312113R	BEAD CORE SMD(0805)120Ω 3A PBY201209T-1	1	PC
1180	F802,	430613740400R	FUSE SLW 4A/32V SMD U/C/ 0603 ROHS	1	PC
1190	R824,	414908100210R	RES SMD (0805) 10KΩ F,RT RoHS REV:A	1	PC
1200		791501410600R	PCBA,P/I BOARD,AI,W/O,LE22E2-610 ROHS	1	PC
1210	R515,	414916220210R	RES SMD (0603) 22KΩ F,RT RoHS	1	PC
1220	R516,	414916300310R	RES SMD (0603) 300KΩ F,RT,RoHS	1	PC
1230	Q801,	410070010210R	XSTR PMBT4401 NPN SOT23(PHILIPS)RoHS	1	PC
1240		410070010240R	XSTR MMBT4401 NPN SOT23(FAIRCHILD)RoHS	0	PC
1250		410070010420R	XSTR MMBT4401 NPN SOT23(PANJIT)RoHS	0	PC
1260	R507,	414908680010R	RES SMD (0805)680Ω F,RT,RoHS	1	PC
1270	R827,R836,	414904022050R	RES SMD (1206) 22Ω J,RT,RoHS	2	PC

1280	R545,R546, R547,R548,	414916047150R	RES SMD (0603) 470Ω J,RT RoHS REV:A	4	PC
1290		511110001104R	SEAL-GLUE,3611,(EURO)	0.023	G
1300		511110001100R	SEAL-GLUE,NE8800K,(FUJI)	0	G
1310		511110001101R	SEAL-GLUE,3629,(LOCTITE)	0	G
1320		511110000700R	HERAEUS SMT-ADHESIVE,PD955PY(TAMURA)	0	G
1330	D802,	411020055330R	DIO MUR1100ERL AXIAL LEAD(ON) RoHS	1	PC
1340		411032006020R	DIO FR10-10-LF 1000V/1A AT(FRO NTIER)RoH	0	PC
1350		411020053090R	DIO PS1010R 1000V/1A DO-41(PAN JIT)RoHS	0	PC
1360		411032006040R	DIO FR107 1000V/1A DO-41(MOSPE C)RoHS	0	PC
1370	D803,	411020052020R	DIO A02-LF 200V/1A R1(FEC)RoHS	1	PC
1380		411022010010R	DIO 1N4003 200V/1A DO-41(TSC)	0	PC
1390	R805,	415330208540R	RES MOF 1/2W 0.2Ω J,AT MINI ROHS	1	PC
1400	R813,	415320100540R	RES MOF 1/4W 10Ω J,AT MINI RoHS	1	PC
1410	R818,	415211004140R	RES MF 1/8W 1MΩ F,AT RoHS	1	PC
1420	J502,J503,J504, J520,J523,J801,	430405000000R	JMPR ROLL/KG D=0.6mm,AT,RoHS 7.5MM	105.96	MM
1430	J507,J509,J510, J514,J515,J517, J522,	430405000000R	JMPR ROLL/KG D=0.6mm,AT,RoHS 10MM	141.12	MM
1440	J511,J512,J802,	430405000000R	JMPR ROLL/KG D=0.6mm,AT,RoHS 12.5MM	67.98	MM
1450	J516,J518,	430405000000R	JMPR ROLL/KG D=0.6mm,AT,RoHS 15MM	50.32	MM
1460	J505,J521,	430405000000R	JMPR ROLL/KG D=0.6mm,AT,RoHS 17.5MM	55.32	MM
1470	J501,J506,J508, J513,J803,	430405000000R	JMPR ROLL/KG D=0.6mm,AT,RoHS 20MM	150.8	MM
1480		700000001000R	ASSY,PCB&RIVENT,LE22E2-X10 ROHS	1	PC
1490	ZD802,	411020050090R	DIO P6KE150A,DO-15,AT(PANJIT)RoHS	1	PC
1500		411020050020R	DIO P6KE150A-LF AT(FRONTIER) RoHS	0	PC
1510	IC803,	412022002300R	IC AP431VL TO-92 1% VT (ATC) RoHS	1	PC
1520		412022002440R	IC AZ431BZ-ATRE1 TO-92(BCD) RoHS	0	PC
1530		412022002830R	IC AS431 TO-92 VT(A1SEMI)RoHS	0	PC
1540	C821,	416144740530R	CAP MKT 0.47uF 63V J,VT RoHS	1	PC
1550	C816,C815,	418210227030R	CAP CD X7R 1000pF 500V K VT RoHS	2	PC
1560	C822,	418310413630R	CAP CD Y5V 0.1uF 50V Z,VT RoHS	1	PC
1570	C808,	418210133030R	CAP CD X7R 100pF 1KV K VT RoHS	1	PC
1580	C807,	420281000330R	CAP MG 10UF 35V M,105℃ VT,5X11,ROHS	1	PC
1590	C501,C819,C820, C823,C824,C528,	420424710260R	CAP SD 470uF/25V M 105℃ ST 10x16,RoHS	6	PC
1600	M3,M4,M5,M6, M7,M8,M9,M10, M11,M12,M13,	512006000500R	RIVET,Φ3.0xΦ1.6x3.0mm	11	PC
1610	M1,M2,	512006000600R	RIVET,Φ4.1xΦ2.2x3.0mm	2	PC
1620		491441400100R	PCB,P/I BOARD,LE22E2-X10 ROHS	1	PC

SCHEMATIC DIAGRAM

1. DC to DC



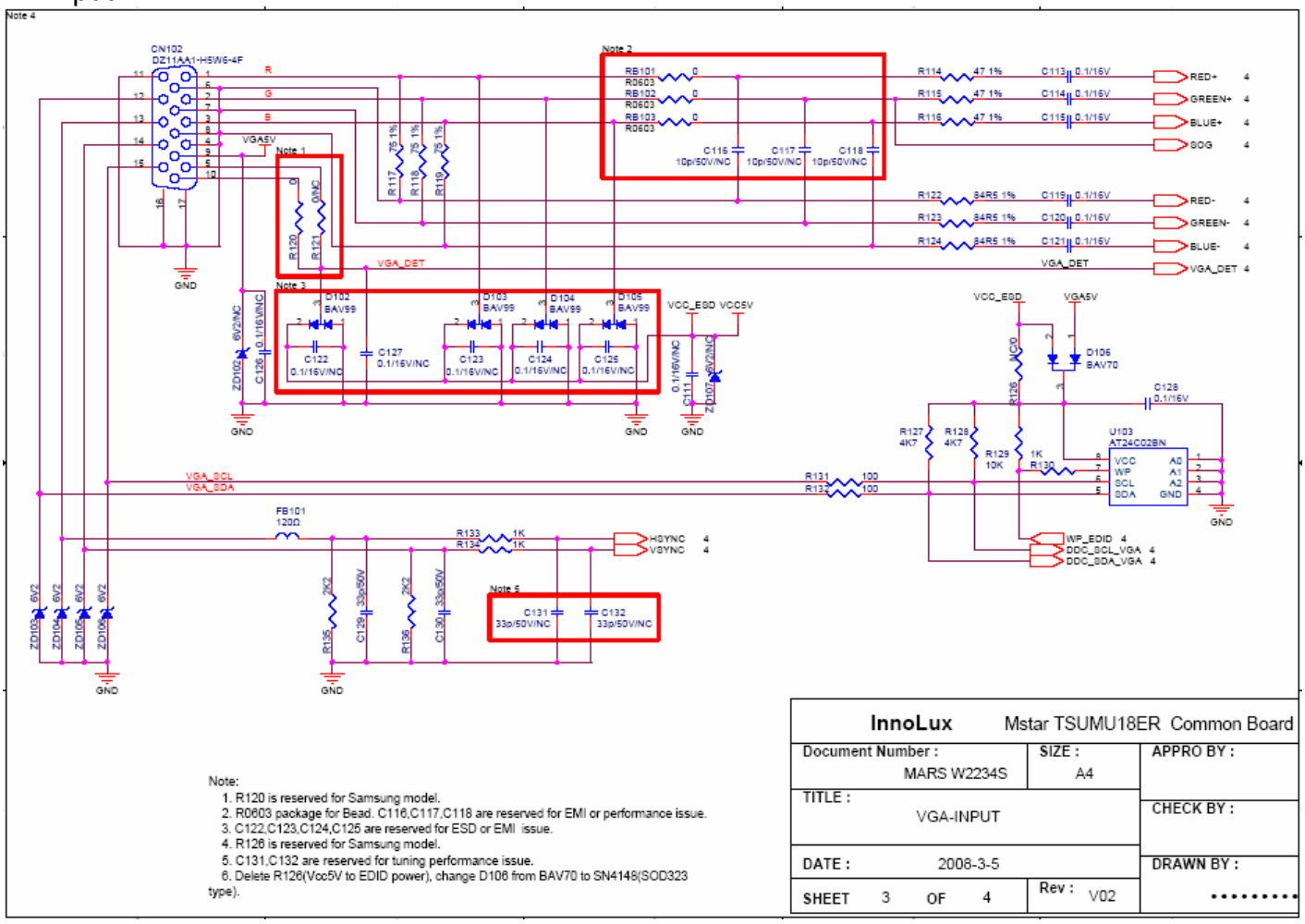
Note:
1. CN101 is no locked packgae for normal model.CN101 is locked packgae for special model(Dell).
2. D101 must be co-layed with R101
3. U101 must contain TO263, TO252 and SOT223 package
4. ZD101 must be co-layed with R113. ZD101 is used for ESD back drive.Reserved C111 for EMI issue.
5. See Table 1.
6. Reserved R111,R112,Q102 for panel power discharge.
7. Add VGA5V to regulator for No VCC5V to read EDID condition.

Table 1

Backlight On/Off	Component Mount	No Connection
High Enable	R102,R104	R103,R106,Q103
Low Enable	R102,R103,R106,Q103	R104

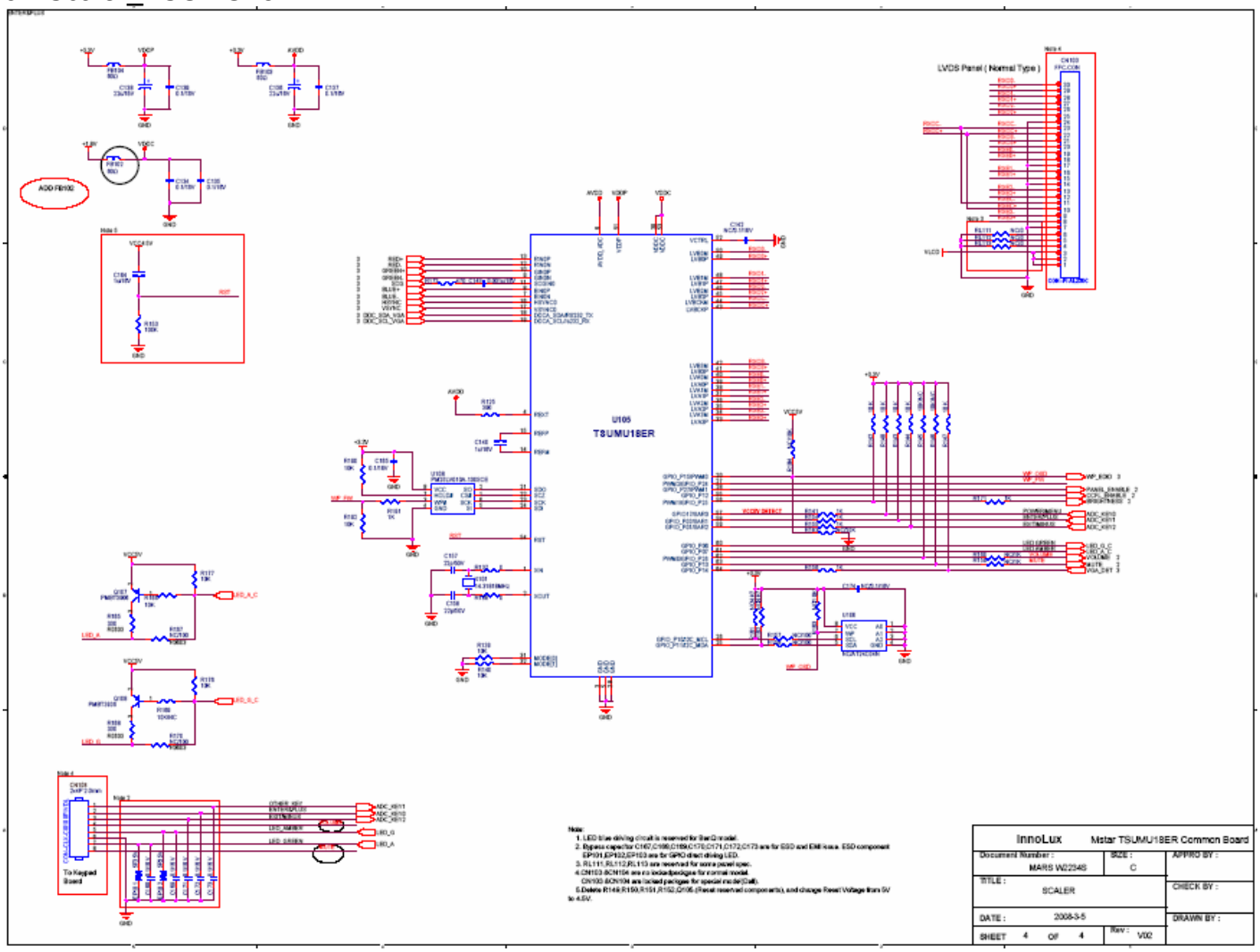
InnoLux	Mstar TSUMU18ER Common Board	
Document Number : MARS W2234S_DVT	SIZE : A4	APPRO BY :
TITLE : POWER (DC TO DC)		CHECK BY :
DATE : 2007-10-31		DRAWN BY :
SHEET 2 OF 4	Rev : V02	

2. Input

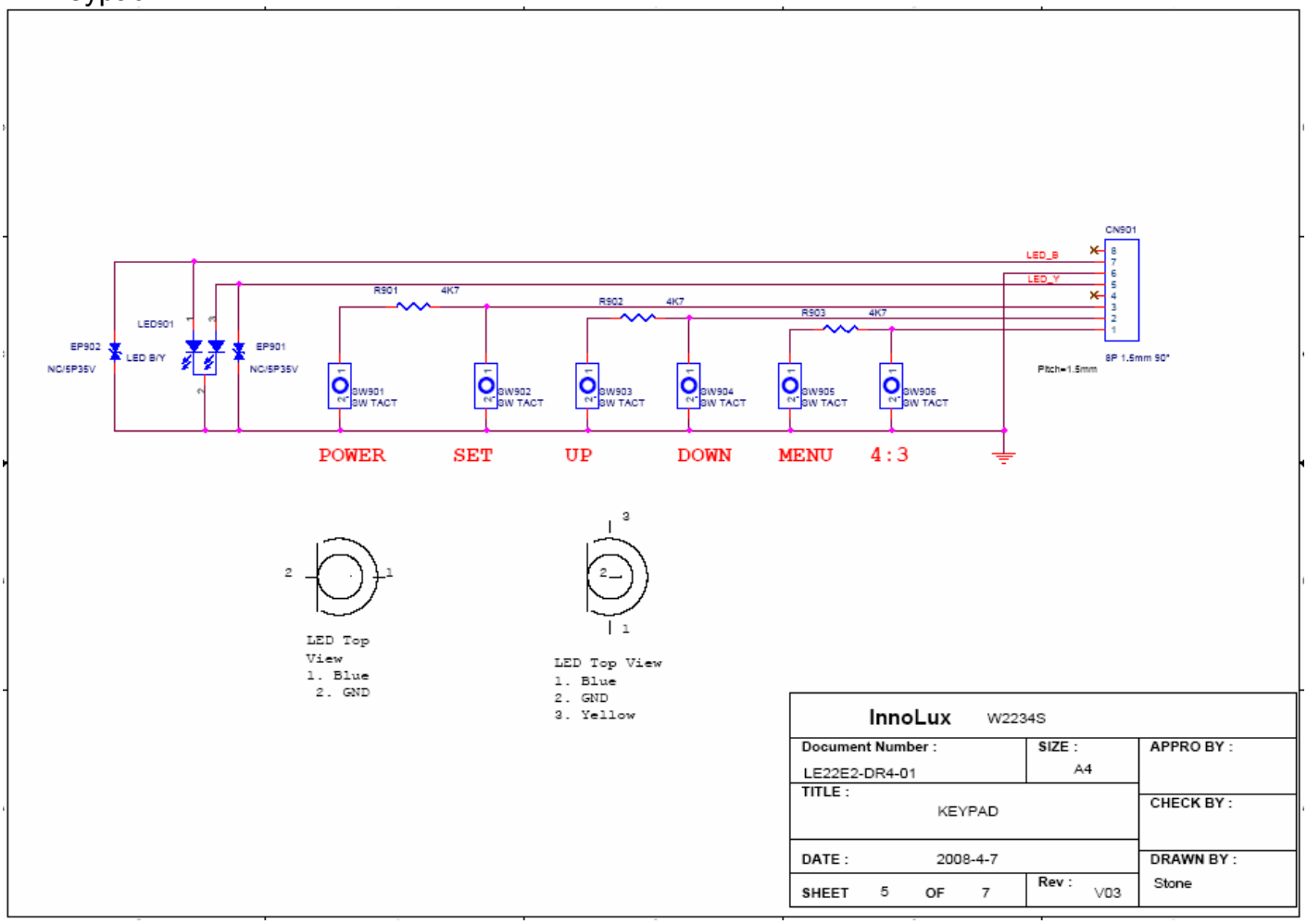


Note:
1. R120 is reserved for Samsung model.
2. R0603 package for Bead. C116,C117,C118 are reserved for EMI or performance issue.
3. C122,C123,C124,C126 are reserved for ESD or EMI issue.
4. R126 is reserved for Samsung model.
5. C131,C132 are reserved for tuning performance issue.
6. Delete R126(Vcc5V to EDID power), change D106 from BAV70 to SN4148(SOD323 type).

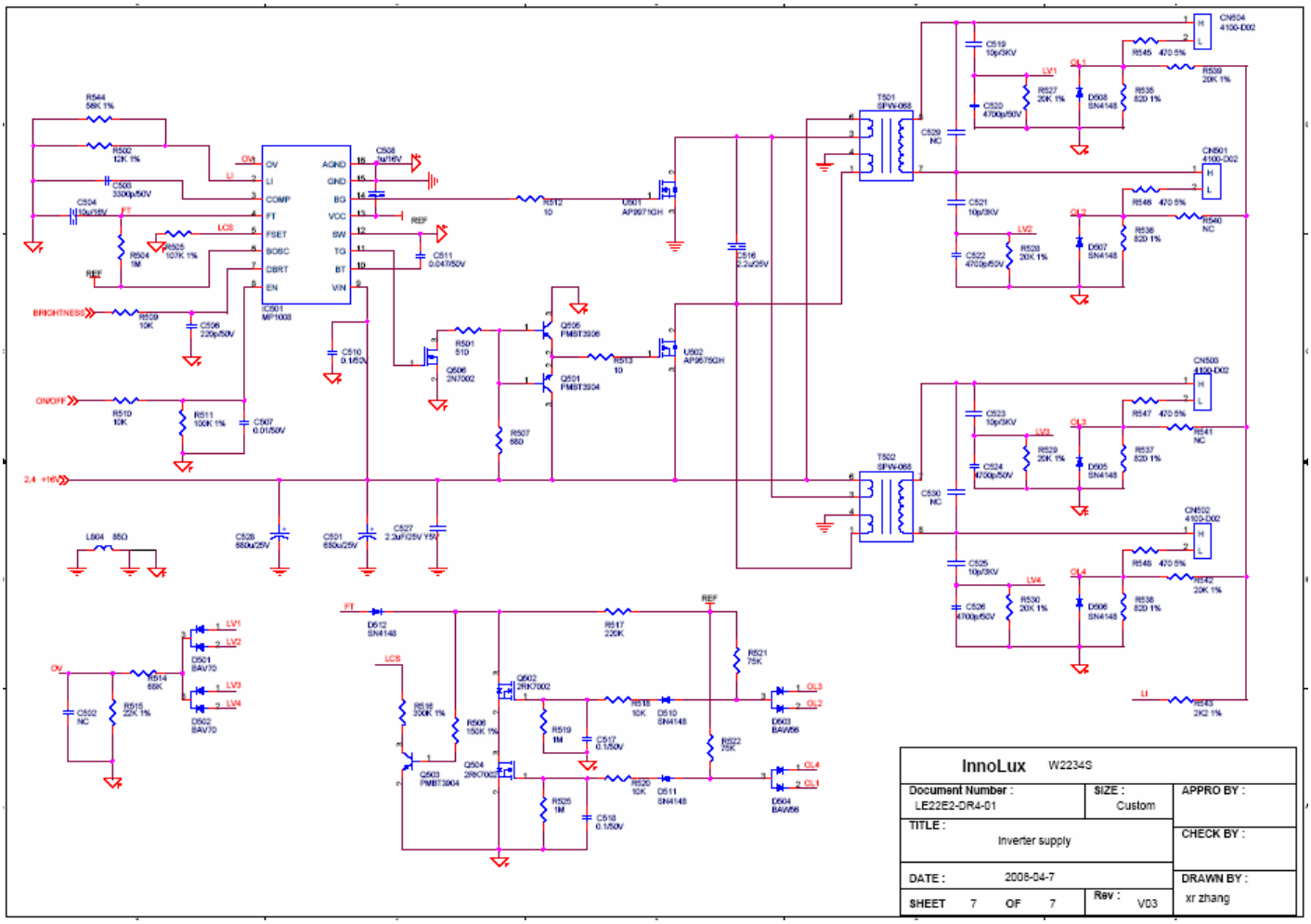
3. Scaler_TSUMU18ER



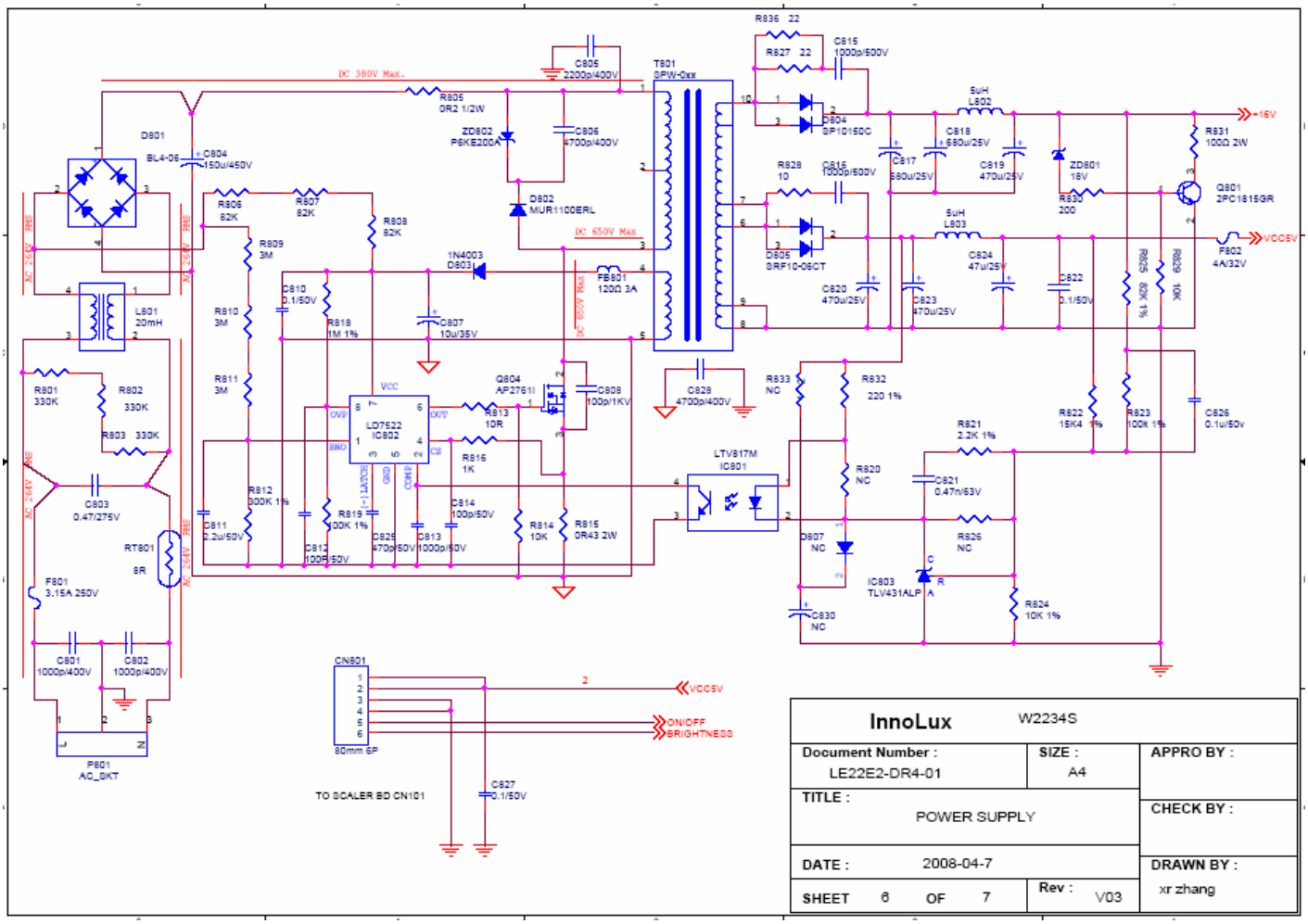
4. Keypad


CN901
LED_B
LED_Y
8P 1.5mm 90°
Pitch=1.5mm
R901 4K7
R902 4K7
R903 4K7
LED901
EP902
NC/5P35V
LED B/Y
EP901
NC/5P35V
SW901 SW TACT
SW902 SW TACT
SW903 SW TACT
SW904 SW TACT
SW905 SW TACT
SW906 SW TACT
POWER
SET
UP
DOWN
MENU
4:3
LED Top View
1. Blue
2. GND
LED Top View
1. Blue
2. GND
3. Yellow
InnoLux W2234S
Document Number : LE22E2-DR4-01
SIZE : A4
APPRO BY :
TITLE : KEYPAD
CHECK BY :
DATE : 2008-4-7
DRAWN BY : Stone
SHEET 5 OF 7
Rev : V03

5. Inverter


InnoLux W2234S
Document Number : LE22E2-DR4-01
SIZE : Custom
APPRO BY :
TITLE : Inverter supply
CHECK BY :
DATE : 2008-04-7
DRAWN BY : xr zhang
SHEET 7 OF 7
Rev : V03

6. Power


InnoLux
W2234S
Document Number :
LE22E2-DR4-01
SIZE :
A4
APPRO BY :
TITLE :
POWER SUPPLY
CHECK BY :
DATE :
2008-04-7
DRAWN BY :
xr zhang
SHEET 6 OF 7
Rev : V03
T801 EFW-0xx
LD7522 IC802
LTV817M IC801
IC803 TLV431ALP
Q804 AP2761I
Q801 2PC1815GR
D801 BL4-06
D802 MUR1100ERL
D804 SPI01S0C
D805 SRF10-06CT
1N4003 D803
ZD802 P6KE200A
ZD801 18V
L801 20mH
5uH L802
5uH L803
FB801 120Ω 3A
F801 3.15A 250V
F802 4A/32V
RT801 8R
P801 AC_SKT
CN801 80mm 6P
TO SCALER BD CN101
VCC5V
+16V
ON/OFF
BRIGHTNESS
DC 380V Max.
DC 650V Max.
AC 264V RMS

. 2008

P/NO: Printed in Korea